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OM protein - protein search, using sw model

Run on: April 8, 2004, 15:30:06; Search time 43.3077 Seconds

(without alignments)

71.766 Million cell updates/sec

Title: US-09-787-443A-21

Perfect score: 11

Sequence: 1 AKSRKGNSSLM 11

Scoring table: OLIGO

Gapop 60.0 , Gapext 60.0

Searched: 1586107 seqs, 282547505 residues

Word size:

Total number of hits satisfying chosen parameters: 22883

Minimum DB seq length: 11 Maximum DB seq length: 11

Post-processing: Listing first 100 summaries

Database: A Geneseq 29Jan04:\*

1: geneseqp1980s:\*

2: geneseqp1990s:\*

3: geneseqp2000s:\*

4: geneseqp2001s:\*

5: geneseqp2002s:\*

6: geneseqp2003as:\*

7: genesegp2003bs:\*

8: genesegp2004s:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

CHIMMADTEC

					SUMMARTES	)	
		용					
Result		Query					
No.	Score	Match	Length	DB	ID	Descripti	on
 1	 11	100.0	11	- <b></b>	AAY88549		NCAM Igl
2	11	100.0	11	5	ABG69349	Abg69349	Human neu
3	4	36.4	11	2	AAR04739	Aar04739	Deduced s
4	4	36.4	11	2	AAY07532	Aay07532	${\tt Laminin-d}$
5	4	36.4	11	2	AAY07531	Aay07531	${\tt Laminin-d}$
6	4	36.4	11	2	AAW76689	Aaw76689	Plasmid p
7	4	36.4	11	4	AAM98749	Aam98749	Human pep
8	4	36.4	11	4	AAB68771	Aab68771	Human FAS
9	4	36.4	11	4	ABP17604	Abp17604	HIV B58 s

1.0	4	36.4	11 5	ABB74319	Abb74319 Simple nu
10	4 4	36.4	11 6	ABP99717	Abp99717 Human sec
11	4	36.4	11 6	ABP72546	Abp72546 Peptide e
12		36.4		ABR01199	Abr01199 Human gen
13	4		11 6 11 7	ADC22397	Adc22397 Nuclear 1
14	4	36.4		AAP50987	Aap50987 FTS-deriv
15	3	27.3	11 1	AAP50987	Aap50941 Hepatitis
16	3	27.3	11 1	AAP82901	Aap82901 Activated
17	3	27.3	11 1	AAP80854	Aap80854 Sequence
18	3	27.3	11 1		Aap800034 Sequence Aap81302 Atrial na
19	3	27.3	11 1	AAP81302 AAY07371	Aay07371 Matrix me
20	3	27.3	11 2		Aar07165 Synthetic
21	3	27.3	11 2 11 2		Aar107103 Synthetic Aar10045 N-termina
22	3	27.3			Aar14094 Pre-S(1-1
23	3	27.3	11 2		Aar44308 Ballast c
24	3	27.3	11 2		Aar31358 Antimicro
25	3	27.3	11 2		Aar24850 Weight re
26	3	27.3	11 2		Aar24030 Weight le Aar28088 Cell-to-c
27	3	27.3	11 2		Aar25763 Histone H
28	3	27.3	11 2		Aar27520 Effector
29	3	27.3	11 2		Aar27520 Effector Aar26085 Immunisin
30	3	27.3	11 2		Aar26084 Immunisin
31	3	27.3	11 2		Aar26084 Immunisin Aar26832 TY-11(6)
32	3	27.3	11 2		
33	3	27.3	11 2		Aar26834 CY-11(8)
34	3	27.3	11 2		Aar26833 CY-11(7)
35	3	27.3	11 2		Aar26835 CY-11(9)
36	3	27.3	11 2		Aar36904 Insulin-l
37	3	27.3	11 2		Aar36924 Insulin-l
38	3	27.3	11 2		Aar36905 Insulin-l
39	3	27.3	11 2		Aar36894 Insulin-l
40	3	27.3	11 2		Aar36917 Insulin-l
41	3	27.3	11 2		Aar36874 Insulin-l
42	3	27.3	11 2		Aar36914 Insulin-l
43	3	27.3	11 2		Aar42959 Beta chai
44	3	27.3	11 2		Aar42956 Beta chai
45	3	27.3	11 2		Aar32352 Human Fac
46	3	27.3	11 2		Aar43594 Peptide d
47	3	27.3	11 2		Aar43598 Peptide d
48	3	27.3	11 2		Aar43618 Peptide d
49	3	27.3	11 2		Aar43599 Peptide d
50	3	27.3	11 2		Aar43638 Peptide d
51	3	27.3	11 2		Aar37430 Promega p
52	3	27.3	11 2		Aar44560 Encoded b
5.3	3	2 <b>7.</b> _3	-11-2		Aar53641_Mutant_tr_
54	3	27.3	11 2		Aar52885 TK-SH2 as
55	3	27.3	11 2		Aar52886 TK-SH2 as
56	3	27.3	11 2		Aar68593 Rat NDF p
57	3	27.3	11 2		Aar78518 Synthetic
58	3	27.3	11 2		Aaw21497 Hepatitis
59	3	27.3	11 2		Aaw21210 Farnesyl
60	3	27.3	11 2		Aar98482 Anti-IL-5
61	3	27.3	11 2		Aaw05770 Presenili
62	3	27.3	11 2	AAR89702	Aar89702 Prostate
63	3	27.3	11 2	AAR89705	Aar89705 Prostate
64	3	27.3	11 2	AAR98513	Aar98513 CD8 antag
65	3	27.3	11 2	AAW06895	Aaw06895 Anti-CD18
66	3	27.3	11 2	AAR91286	Aar91286 Anti-idio

67	3	27.3	11	2	AAW09653	Aaw09653	Labelled
68	3	27.3	11	2	AAE22529	Aae22529	Human Fcg
69	3	27.3	11	2	AAW11502	Aaw11502	Humanised
70	3	27.3	11	2	AAW44188	Aaw44188	H-2Kd-res
71	3	27.3	11	2	AAW11511	Aaw11511	Humanised
72	3	27.3	11	2	AAW30194	Aaw30194	Salvage r
73	3	27.3	11	2	AAW15672	Aaw15672	Platelet
74	3	27.3	11	2	AAW25009	Aaw25009	Oncoimmun
75	3	27.3	11	2	AAW28862	Aaw28862	HTLV-1a,c
76	3	27.3	11	2	AAW24059	Aaw24059	Salvage r
77	3	27.3	11	2	AAW15948	Aaw15948	Interleuk
78	3	27.3	11	2	AAW27332	Aaw27332	Salvage r
79	3	27.3	11	2	AAW33597	Aaw33597	Oligopept
80	3	27.3	11	2	AAW33539	Aaw33539	Oligopept
81	3	27.3	11	2	AAW33536	Aaw33536	Oligopept
82	3	27.3	11	2	AAW33583	Aaw33583	Oligopept
83	3	27.3	11	2	AAW41012	Aaw41012	Anti-glut
84	3	27.3	11	2	AAW34507	Aaw34507	Salvage r
85	3	27.3	11	2	AAW65652	Aaw65652	Peptide #
86	3	27.3	11	2	AAW62364	Aaw62364	Antithrom
87	3	27.3	11	2	AAW42459		Mouse ant
88	- 3	27.3	11	2	AAW57427		Amino aci
89	3	27.3	11	2	AAW68880	Aaw68880	Peptide b
90	3	27.3	11	2	AAW59349	Aaw59349	Human Fab
91	3	27.3	11	2	AAW72876	Aaw72876	Bacillus
92	3	27.3	11	2	AAW40511	Aaw40511	Mouse ner
93	3	27.3	11	2	AAW40510		Human ner
94	3	27.3	11	2	AAW62020		Salvage r
95	3	27.3	11	2	AAY20426	_	Human mic
96	3	27.3	11	2	AAW54632		Peptide f
97	3	27.3	11	2	AAW70627		Salvage r
98	3	27.3	11	2	AAW37137		Cyclic pi
99	3	27.3	11	2	AAW40573		Human IgG
100	3	27.3	11	2	AAW44819	Aaw44819	Salvage r

## ALIGNMENTS

```
RESULT 1
AAY88549
     AAY88549 standard; peptide; 11 AA.
XX
    AAY88549; --
AC-
XX
     07-AUG-2000 (first entry)
DT
XX
     NCAM Igl binding peptide #21.
DE
XX
     NCAM; neural cell adhesion molecule; Ig1; immunoglobulin domain 1;
KW
     neurite outgrowth promoter; proliferation; nerve damage; sclerosis;
KW
     impaired myelination; stroke; Parkinson's disease; memory; schizophrenia;
KW
     Alzheimer's disease; diabetes mellitus; circadian clock; nephrosis;
KW
     treatment; prosthetic nerve guide; treatment; nervous system.
KW
XX
OS
     Synthetic.
XX
```

```
WO200018801-A2.
PN
XX
     06-APR-2000.
PD
XX
                     99WO-DK000500.
     23-SEP-1999;
PF
XX
     29-SEP-1998;
                     98DK-00001232.
PR
                     99DK-00000592.
     29-APR-1999;
PR
XX
     (RONN/) RONN L C B.
PA
     (BOCK/) BOCK E.
PA
     (HOLM/) HOLM A.
PA
     (OLSE/) OLSEN M.
PA
     (OSTE/) OSTERGAARD S.
PA
     (JENS/) JENSEN P H.
PΑ
     (POUL/) POULSEN F M.
PΑ
     (SORO/) SOROKA V.
PA
     (RALE/) RALETS I.
PΑ
     (BERE/) BEREZIN V.
PΑ
```

Ronn LCB, Bock E, Holm A, Olsen M, Ostergaard S, Jensen PH; Poulsen FM, Soroka V, Ralets I, Berezin V;

WPI; 2000-293111/25.

XX

PΙ

PI XX

DR XX

PT

PT

PT XX

PS XX

CC

CC-

CC

CC XX Compositions that bind neural cell adhesion molecules useful for treating disorders of the nervous system and muscles e.g. Alzheimer's and Parkinson's diseases.

Example 4; Page 25; 119pp; English.

Neural cell adhesion molecule (NCAM) is a cellular adhesion molecule. NCAM is found in three forms, two of which are transmembrane forms, while the third is attached via a lipid anchor to the cell membrane. All three NCAM forms have an extracellular structure consisting five immunoglobulin domains (Ig domains). The Ig domains are numbered 1 to 5 from the Nterminal. The present sequence represents a peptide which binds to the NCAM Ig1 domain. The peptide can be used in a compound which binds to NCAM-Ig1/Ig2 domains, and is capable of stimulating or promoting neurite outgrowth from NCAM presenting cells, and is also capable of promoting the proliferation of NCAM presenting cells. The compound may be used in the treatment of normal, degenerated or damaged NCAM presenting cells. The compound may in particular be used to treat diseases of the central and peripheral nervous-systems-such-as-post-operative-nerve-damage,---traumatic nerve damage, impaired myelination of nerve fibres, conditions resulting from a stroke, Parkinson's disease, Alzheimer's disease, dementias, sclerosis, nerve degeneration associated with diabetes mellitus, disorders affecting the circadian clock or neuro-muscular transmission and schizophrenia. Conditions affecting the muscles may also be treated with the compound, such as conditions associated with impaired function of neuromuscular connections (e.g. genetic or traumatic shock or traumatic atrophic muscle disorders). Conditions of the gonads, pancreas (e.g. diabetes mellitus types I and II), kidney (e.g. nephrosis), heart, liver and bowel may also be treated using the compound. The compound is used in a prosthetic nerve guide, and also to stimulate the ability to learn, and to stimulate the memory of a subject

```
100.0%; Score 11; DB 3; Length 11;
 Query Match
                          100.0%; Pred. No. 6.4e-05;
  Best Local Similarity
                                                                 0; Gaps
                                                                             0;
                                0; Mismatches
                                                   0; Indels
           11; Conservative
            1 AKSRKGNSSLM 11
Qv
              1 AKSRKGNSSLM 11
Db
RESULT 2
ABG69349
    ABG69349 standard; peptide; 11 AA.
XX
AC
     ABG69349;
XX
DΤ
     21-OCT-2002 (first entry)
XX
     Human neural cell adhesion molecule (NCAM) peptide #21.
DE
XX
     Human; neural cell adhesion molecule; NCAM; heart muscle cell survival;
KW
     acute myocardial infarction; central nervous system disorder; stroke;
KW
     peripheral nervous system disorder; postoperative nerve damage;
KW
     traumatic nerve damage; spinal cord injury; nerve fibre; schizophrenia;
KW
     postischaemic damage; multiinfarct dementia; multiple sclerosis;
KW
     nerve degeneration; diabetes mellitus; neuro-muscular degeneration;
KW
     Alzheimer's disease; Parkinson's disease;
KW
     Huntington's disease. atrophic muscle disorder; gonad degeneration;
KW
KW
     nephrosis.
XX
OS
     Homo sapiens.
XX
     WO200247719-A2.
PN
XX
     20-JUN-2002.
PD
XX
     12-DEC-2001; 2001WO-DK000822.
PF
XX
     12-DEC-2000; 2000DK-00001863.
PR
XX
     (ENKA-) ENKAM PHARM AS.
PA
XX
     Bock-E, Berezin-V, Kohler-LB;
PI-
XX
DR
     WPI; 2002-583473/62.
XX
     Use of a compound comprising a peptide of neural cell adhesion molecule,
PT
     in the preparation of medicament for preventing death of cells presenting
PT
     NCAM or NCAM ligand and treating central nervous system diseases.
PT
XX
     Disclosure; Page 16; 57pp; English.
PS
XX
     The invention relates to use of a compound (I) comprising a peptide which
CC
     comprises at least 5 contiguous amino acid residues of a sequence of the
CC
     neural cell adhesion molecule (NCAM), its fragment, variant or its mimic,
CC
     for the preparation of a medicament for preventing death of cells
CC
```

SQ

Sequence 11 AA;

```
of a medicament for preventing death of cells presenting the NCAM or an
CC
    NCAM ligand. The medicament is for the stimulation of the survival of
CC
    heart muscle cells, such as survival after acute myocardial infarction.
CC
    The medicament is for the treatment of diseases or conditions of the
CC
     central and peripheral nervous system, such as postoperative nerve
CC
     damage, traumatic nerve damage, e.g. resulting from spinal cord injury,
CC
     impaired myelination of nerve fibres, postischaemic damage, e.g.
CC
     resulting from a stroke, multiinfarct dementia, multiple sclerosis, nerve
CC
     degeneration associated with diabetes mellitus, neuro-muscular
CC
     degeneration, schizophrenia, Alzheimer's disease, Parkinson's disease and
CC
     Huntington's disease. The medicament is for the treatment of diseases or
CC
     conditions of the muscles including conditions with impaired function of
CC
     neuro-muscular connections, such as genetic or traumatic atrophic muscle
CC
     disorders, and for the treatment of diseases of conditions of various
CC
     organs, such as degenerative conditions of the gonads, pancreas (e.g.
CC
     diabetes mellitus type I and II) and kidney (e.g. nephrosis). ABG69329-
CC
     ABG69352 represent human NCAM peptides of the invention
CC
XX
SQ
     Sequence 11 AA;
                          100.0%; Score 11; DB 5; Length 11;
  Query Match
  Best Local Similarity
                          100.0%; Pred. No. 6.4e-05;
            11; Conservative 0; Mismatches
                                                 0; Indels
                                                                 0;
                                                                     Gaps
                                                                             0:
  Matches
            1 AKSRKGNSSLM 11
Qy
              1 AKSRKGNSSLM 11
RESULT 3
AAR04739
     AAR04739 standard; protein; 11 AA.
XX
AC
     AAR04739;
XX
DT
     31-OCT-2002 (revised)
     05-AUG-1990 (first entry)
DT
XX
     Deduced sequence at fusion point of E. coli lacZ and Cellulomonas fimi
DE
     endoglucanase (CenA) in expression plasmid pUCEC2.
DE
XX
     LacZ-endoglucanase expression plasmid pUCEC2; CenA;
KW
     Cellulomonas-fimi-endoglucanase.
KW-
XX
     Cellulomonas fimi.
OS
XX
                     Location/Qualifiers
FH
     Key
                     1. .6
FT
     Protein
                     /note= "lacZ"
FT
                     7. .11
FT
     Protein
                     /note= "CenA"
FT
XX
     WO9000609-A.
PN
XX
PD
     25-JAN-1990.
XX
```

presenting the NCAM or an NCAM ligand. (I) is useful in the preparation

CC

```
28-JUN-1989;
                    89WO-GB000718.
ΡF
XX
     08-JUL-1988;
                    88US-00216794.
PR
XX
     (UYBR-) UNIV BRIT COLUMBIA.
PΑ
XX
     Kilburn DG, Miller RC, Warren RA, Gilkes NR;
PΙ
XX
     WPI: 1990-051713/07.
DR
     N-PSDB; AAQ02961.
DR
XX
     Polysaccharide matrix bonded with fusion protein - contg.
PT
     polysaccharidase binding region and specific polypeptide, useful for
PT
     affinity purificn. and immobilisation, e.g. for drug delivery.
PT
XX
     Example 2; Fig 4B; 47pp; English.
PS
XX
     A 1.6 kb fragment from the 6.0 kb insert of C. fimi DBA in pCEC2 was
CC
     purified and sub-cloned into the SstI site of pUC18 to form pUCEC2. It is
CC
     constructed to illustrate method of preparation of a polysaccharide
CC
     matrix bonded to a hybrid protein and a substrate binding region (SBR) of
CC
     a polysaccharidase. The binding of the hybrid protein to the matrix is a
CC
     rapid and inexpensive method of purifying it. (Updated on 31-OCT-2002 to
CC
CC
     add missing OS field.)
XX
     Sequence 11 AA;
SQ
                          36.4%; Score 4; DB 2; Length 11;
  Query Match
                          100.0%; Pred. No. 1.2e+03;
  Best Local Similarity
                                                                  0;
                                                                              0;
                                                    0; Indels
                                                                      Gaps
             4; Conservative
                               0; Mismatches
  Matches
            8 SSLM 11
Qy
              1111
            7 SSLM 10
Db
RESULT 4
AAY07532
     AAY07532 standard; peptide; 11 AA.
ID
XX
AC
     AAY07532;
XX
DT
     17-AUG-1999
                  (first entry)
XX
     Laminin-derived peptide linked to metal-binding domain.
DE
XX.
     Laminin; diagnostic; metal-binding; polyvalent; linked; branched; repeat;
KW
     platelet accumulation.
KW
XX
OS
     Synthetic.
XX
                      Location/Qualifiers
FH
     Key
                      1. .5
FT
     Domain
                      /label= Biological function
FT
                      /note= "Laminin-derived peptide"
FT
FT
     Modified-site
                      /note= "N-acetyl-Tyr"
FT
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```
Modified-site
FT
                     /note= "The epsilon-amino group of this residue has
FT
                     another biological function domain of formula Ac-YIGSR-
FT
                     attached to it"
FT
                     7. .11
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FT
                     /label= Metal ion-binding
FT
     Misc-difference 10
FT
                     /note= "D-form residue"
FΤ
     Modified-site
FT
                     /note= "Gly-NH2"
FT
XX
     WO9501188-A1.
PN
XX
PD
     12-JAN-1995.
XX
PF
     01-JUL-1994;
                    94WO-US007462.
XX
                    93US-00087219.
     02-JUL-1993;
PR
     30-JUN-1994;
                    94US-00269929.
PR
XX
     (RHOM-) RHOMED INC.
PΑ
XX
                             Freer RJ, Sharma SD;
PI
     Rhodes BA,
                 Zamora PO,
XX
     WPI; 1995-060818/08.
DR
XX
     New high affinity peptide-based compsns. for diagnosis and therapy - in
PT
     which peptide has at least two biological-functional domains and a metal
PT
PT
     ion binding domain.
XX
     Disclosure; Page 42; 60pp; English.
PS
XX
     The patent discloses a high affinity peptide-based pharmaceutical
CC
     composition which comprises (a) at least two linear repeat, linked or
CC
     branched amino acid sequence biological-function domains and (b) one or
CC
     more medically useful metal ion-binding domains. When bound with a
CC
     medically useful metal (e.g. an isotope of Tc, Re, In, Au, Ag, Hg or Cu),
CC
     the composition can be used for detection and treatment of pathological
CC
     conditions and for diagnostic imaging. The composition allows direct
CC
     binding with a metal without the necessity of conjugation to bifunctional
CC
     chelators. Metals can be bound while retaining the high activity of the
CC
     biological function domains. The present sequence represents a laminin-
CC
     derived peptide (a preferred example of a biological function domain)
CC
     joined-to-a-metal-ion binding domain-via-a-Lys-residue-which-has-another-
CC-
     laminin-derived peptide attached to its side chain amino group. Metal-
CC
     bound compositions containing the sequence can be used for detection of
CC
     sites of platelet accumulation in e.g. thrombosis, pulmonary embolism,
CC
     inflammatory response secondary to myocardial infarction, endocarditis,
CC
     bypass graft occlusion, aneurysms, prosthetic arterial graft platelet
CC
     accumulation, prosthetic arterial graft platelet occlusion, cerebral
CC
     embolism, cerebral haemorrhage, traumatic injury with haemorrhage,
CC
     gastrointestinal haemorrhage and thrombosis secondary to catheters and
CC
     other implanted devices, or for detection of carcinomas including primary
CC
```

CC XX SQ carcinomas and metastatic carcinomas

```
36.4%; Score 4; DB 2; Length 11;
  Query Match
  Best Local Similarity
                          100.0%; Pred. No. 1.2e+03;
                                                                               0;
             4; Conservative 0; Mismatches
                                                    0; Indels
                                                                   0; Gaps
  Matches
            3 SRKG 6
QУ
              -1111
            4 SRKG 7
RESULT 5
AAY07531
     AAY07531 standard; peptide; 11 AA.
ID
XX
     AAY07531;
AC
XX
DT
     17-AUG-1999 (first entry)
XX
     Laminin-derived peptide linked to metal-binding domain.
DE
XX
     Laminin; diagnostic; metal-binding; polyvalent; linked; branched; repeat;
KW
ΚW
     platelet accumulation.
XX
OS
     Synthetic.
XX
                     Location/Qualifiers
FH
     Key
                      1. .5
FT
     Domain
                      /label= Biological function
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                      /note= "Laminin-derived peptide"
FT
     Modified-site
FT
                      /note= "N-acetyl-Tyr"
FT
     Modified-site
\operatorname{FT}
                      /note= "The epsilon-amino group of this residue has
FT
                      another biological function domain of formula Ac-YIGSR-
FT
                      attached to it"
FT
                      7. .11
     Domain
FT
                      /label= Metal ion-binding
FT
FT
     Modified-site
                      /note= "Ala-NH2"
FΤ
XX
PN
     WO9501188-A1.
XX
PD
     12-JAN-1995.
XX
PF-
     -01-JUL-1994; ---94WO-US007462. ------
XX
PR
     02-JUL-1993;
                     93US-00087219.
     30-JUN-1994;
                     94US-00269929.
PR
XX
     (RHOM-) RHOMED INC.
PΑ
XX
                 Zamora PO, Freer RJ, Sharma SD;
PΙ
     Rhodes BA,
XX
DR
     WPI; 1995-060818/08.
XX
     New high affinity peptide-based compsns. for diagnosis and therapy - in
PT
     which peptide has at least two biological-functional domains and a metal
PT
PT
     ion binding domain.
```

```
Disclosure; Page 42; 60pp; English.
PS
XX
     The patent discloses a high affinity peptide-based pharmaceutical
CC
     composition which comprises (a) at least two linear repeat, linked or
CC
     branched amino acid sequence biological-function domains and (b) one or
CC
     more medically useful metal ion-binding domains. When bound with a
CC
     medically useful metal (e.g. an isotope of Tc, Re, In, Au, Ag, Hg or Cu),
CC
     the composition can be used for detection and treatment of pathological
CC
     conditions and for diagnostic imaging. The composition allows direct
CC
     binding with a metal without the necessity of conjugation to bifunctional
CC
     chelators. Metals can be bound while retaining the high activity of the
CC
     biological function domains. The present sequence represents a laminin-
CC
     derived peptide (a preferred example of a biological function domain)
CC
     joined to a metal ion binding domain via a Lys residue which has another
CC
     laminin-derived peptide attached to its side chain amino group. Metal-
CC
     bound compositions containing the sequence can be used for detection of
CC
     sites of platelet accumulation in e.g. thrombosis, pulmonary embolism,
CC
     inflammatory response secondary to myocardial infarction, endocarditis,
CC
     bypass graft occlusion, aneurysms, prosthetic arterial graft platelet
CC
     accumulation, prosthetic arterial graft platelet occlusion, cerebral
CC
     embolism, cerebral haemorrhage, traumatic injury with haemorrhage,
CC
     gastrointestinal haemorrhage and thrombosis secondary to catheters and
CC
     other implanted devices, or for detection of carcinomas including primary
CC
     carcinomas and metastatic carcinomas
CC
XX
SQ
     Sequence 11 AA;
                          36.4%; Score 4; DB 2; Length 11;
  Query Match
                          100.0%; Pred. No. 1.2e+03;
  Best Local Similarity
                                                                              0;
                                                                  0; Gaps
                                0; Mismatches
                                                  0; Indels
             4; Conservative
            3 SRKG 6
Qу
              1111
            4 SRKG 7
Db
RESULT 6
AAW76689
     AAW76689 standard; protein; 11 AA.
XX
AC
     AAW76689;
XX
DT-
     05-JAN-1999 (first-entry) ---
XX
     Plasmid pGEX-3X protein fragment.
DΕ
XX
     Dendroaspin; snake venom; clotting cascade; anticoagulant; platelet;
KW
     integrin binding; injury; blood; cell migration; thrombosis; inhibitor;
KW
     proliferation; signal transduction; regulator; coagulation; treatment;
KW
     prophylactic; artery; vein; wall thickening; myocardial infarction;
KW
     retinal neovascularisation; dysregulated apoptosis; tumorigenesis;
KW
     leukocyte recruitment, immune system; tissue fibrosis.
KW
XX
OS
     Synthetic.
XX
PN
     WO9842834-A1.
```

XX

```
XX
     01-OCT-1998.
PD
XX
                    98WO-GB000848.
     20-MAR-1998;
PF
XX
                    97GB-00005787.
     20-MAR-1997;
PR
XX
     (THRO-) THROMBOSIS RES INST.
PA
XX
     Lu X, Scully MF, Kakkar V, Authi K;
PΙ
XX
    WPI; 1998-542278/46.
DR
    N-PSDB; AAV61951.
DR
XX
     New hybrid dendroaspin polypeptide(s) - used for treating, e.g.
PT
     thrombosis, myocardial infarction, dysregulated apoptosis, abnormal cell
PT
     migration and immune system activation.
PT
XX
     Example 2; Fig 4; 59pp; English.
PS
XX
     This sequence represents a fragment of the plasmid pGEX-3X which is used
CC
     in the isolation of a snake venom dendroaspin fragment. When dendroaspin
CC
     is modified to incorporate further functional amino acid sequence, e.g.
CC
     active portions or motifs of agonists, antagonists or inhibitors of
CC
     factors in the clotting cascade, the resulting molecules are particularly
CC
     useful as anticoagulants. The molecules have an integrin binding activity
CC
     which when administered in vivo results in the binding of the molecules
CC
     to platelets thereby inhibiting the aggregation of the platelets at sites
CC
     of injury. Non-wild type dendroaspin domains provide secondary,
CC
     optionally further functionality, e.g. antithrombotic action, inhibiting
CC
     cell migration and proliferation and regulating signal transduction. Such
CC
     variants have bi- or multifunctional activities against blood
CC
     coagulation, particularly thrombus formation and arterial/venous wall
CC
     thickening at the sites of injury. The variants may have activities
CC
     against leukocyte recruitment, immune system activation, tissue fibrosis
CC
     and tumourigenesis. The polypeptides can be used for the treatment or
CC
     prophylaxis of a disease associated with thrombosis, e.g. myocardial
CC
     infarction, retinal neovascularisation, endothelial injury, dysregulated
CC
     apoptosis, abnormal cell migration, leukocyte recruitment, immune system
CC
     activation, tissue fibrosis or tumorigenesis
CC
XX
SQ
     Sequence 11 AA;
  Query-Match-------36.4%; -Score-4; -DB-2; Length-11;
                          100.0%; Pred. No. 1.2e+03;
  Best Local Similarity
                                                                              0;
                                                                  0; Gaps
                                                   0; Indels
  Matches
             4; Conservative
                                 0; Mismatches
            6 GNSS 9
Qy
              8 GNSS 11
Db
RESULT 7
AAM98749
     AAM98749 standard; peptide; 11 AA.
XX
AC
     AAM98749;
```

```
XX
     24-JAN-2002
                 (first entry)
DT
XX
     Human peptide #2024 encoded by a SNP oligonucleotide.
DE
XX
     Immunosuppressive; immunostimulatory; antiinflammatory; cytostatic;
KW
     neuroprotective; antimicrobial; gene therapy; vaccine; amylase; cancer;
KW
     amyloid protein; angiopoietin; apoptosis related protein; cadherin;
KW
     cyclin; polymerase; oncogene; histone; kinase; colony stimulating factor;
ΚW
     complement related protein; cytochrome; kinesin; cytokine; interferon;
KW
     interleukin; G-protein coupled receptor; thioesterase; inflammation;
KW
     multifactorial disease; autoimmune disease; infection;
KW
     nervous system disease.
KW
XX
OS
     Homo sapiens.
XX
     WO200147944-A2.
PN
XX
     05-JUL-2001.
PD
XX
     28-DEC-2000; 2000WO-US035498.
PF
XX
                    99US-0173419P.
PR
     28-DEC-1999;
     27-DEC-2000; 2000US-00173419.
PR
XX
     (CURA-) CURAGEN CORP.
PΑ
XX
PΙ
     Shimkets RA, Leach M;
XX
     WPI; 2001-465210/50.
DR
XX
     Polymorphic nucleic acids encoding e.g. amylases, cyclins, polymerases,
PT
     oncogenes and histones, useful for diagnosing and treating, e.g. cancer,
PT
     autoimmune diseases and infections.
PT
XX
     Disclosure; Page 4112; 4143pp; English.
PS
XX
     The present invention relates to oligonucleotides (see AAL26793-AAL34659)
CC
     encoding polymorphic variants of proteins related to amylases, amyloid
CC
     proteins, angiopoietin, apoptosis related proteins, cadherin, cyclin,
CC
     polymerase, oncogenes, histones, kinases, colony stimulating factors,
CC
     complement related proteins, cytochromes, kinesins, cytokines,
CC
     interferons, interleukins, G-protein coupled receptors and thioesterases.
CC
     The present sequence is a peptide encoded by one such oligonucleotide.
CC-
     The oligonucleotides and the peptides encoded by them may be used in the
CC
     prevention, diagnosis and treatment of diseases associated with
CC
     inappropriate expression of the proteins listed above. Disorders that may
CC
     be prevented, diagnosed and/or treated include multifactorial diseases
CC
     with a genetic component, such as autoimmune diseases (e.g. rheumatoid
CC
     arthritis, multiple sclerosis, diabetes, systemic lupus erythromatosus
CC
     and Grave's disease), inflammation, cancer (e.g. cancers of the bladder,
CC
     brain, breast, colon and kidney, leukaemia), diseases of the nervous
CC
     system and an infection of pathogenic organisms
CC
XX
SQ
     Sequence 11 AA;
```

```
100.0%; Pred. No. 1.2e+03;
  Best Local Similarity
                                                                  0; Gaps
                                                                              0;
             4; Conservative
                                 0; Mismatches
                                                  0;
                                                       Indels
            8 SSLM 11
Qу
              1111
            7 SSLM 10
Db
RESULT 8
AAB68771
    AAB68771 standard; peptide; 11 AA.
ID
XX
AC
    AAB68771;
XX
DT
     18-APR-2001 (first entry)
XX
DE
    Human FAS peptide #1.
XX
     Human; fatty acid synthase; FAS; polyketide synthase;
KW
KW
     ketoacyl synthase domain; decarboxylation; polyketide synthase priming.
XX
OS
     Homo sapiens.
XX
PN
     WO200104274-A2.
XX
PD
     18-JAN-2001.
XX
     06-JUL-2000; 2000WO-US018494.
PF
XX
                    99US-00348974.
PR
     07-JUL-1999;
XX
     (CHIL-) CHILDREN'S HOSPITAL OAKLAND RES INST.
PΑ
XX
     Smith S, Joshi A, Rangan V, Witkowski A;
PI
XX
     WPI; 2001-138335/14.
DR
XX
     Novel polyketide synthase with improved and enhanced priming, generated
PT
     by incorporating a ketoacyl synthase domain with increased
PT
     decarboxylative activity into loading module of polyketide synthase.
PT
XX
PS
     Disclosure; Fig 1A; 39pp; English.
XX
     The present sequence is qiven in a specification relating to a novel
CC
     polyketide synthase with improved and enhanced priming. The polyketide
CC
     synthase was generated by incorporating a ketoacyl synthase domain with
CC
     increased decarboxylative activity into a loading module of polyketide
CC
     synthase. The loading module comprises an acyl carrier protein, an acyl
CC
     transferase domain and a ketoacyl synthase domain variant with a non-
CC
     nucleophilic residue at the position corresponding to residue 161 in the
CC
CC
     rat fatty acid synthase. The ketoacyl synthase domain has increased
     decarboxylase activity by mutation of a conserved active site cysteine
CC
     residue corresponding to residue 161 in rat fatty acid synthase. The
CC
     ketoacyl synthase domains with enhanced decarboxylation activity improve
CC
     priming or loading of polyketide synthases
CC
XX
SQ
     Sequence 11 AA;
```

```
36.4%; Score 4; DB 4; Length 11;
  Query Match
                          100.0%; Pred. No. 1.2e+03;
  Best Local Similarity
                                                                  0; Gaps
                                                  0; Indels
                                                                              0;
             4; Conservative
                                0; Mismatches
  Matches
            8 SSLM 11
Qу
              \perp
            7 SSLM 10
Db
RESULT 9
ABP17604
     ABP17604 standard; peptide; 11 AA.
XX
AC
     ABP17604;
XX
     11-SEP-2003
                 (revised)
DT
                 (first entry)
DT
     15-JUL-2002
XX
     HIV B58 super motif env peptide #5.
DE
XX
     HIV; HIV-1; human immunodeficiency virus; env; pol; gag; nef; vpr; vpu;
KW
     vif; tat; cytotoxic T lymphocyte; CTL; immune response; epitope; antigen;
KW
     vaccine; HIV infection; immunisation; virucide.
KW
XX
     Human immunodeficiency virus 1.
OS
XX
     WO200124810-A1.
PN
XX
     12-APR-2001.
PD
XX
     05-OCT-2000; 2000WO-US027766.
PF
XX
                    99US-00412863.
     05-OCT-1999;
PR
XX
     (EPIM-) EPIMMUNE INC.
PA
XX
                          Southwood S, Livingston BD, Chesnut R;
     Sette A, Sidney J,
PI
     Baker DM, Celis E,
                          Kubo RT, Grey HM;
PΙ
XX
     WPI; 2001-354887/37.
DR
XX
     Vaccine compositions comprising human immunodeficiency virus-1 (HIV-1)
PT
     peptide groups, useful for vaccinating against HIV-1.
PT-
XX
     Claim 32; Page 230; 448pp; English.
PS
XX
     The present invention describes a composition (I) comprising a prepared
CC
     human immunodeficiency virus-1 (HIV-1) group comprising an amino acid
CC
     sequence selected from 51 defined amino acid sequences (ABL25347 to
CC
     ABP25397). (I) has virucide activity and can be used in vaccines. (I) may
CC
     be used for immunising subjects against HIV-1 infections. The use of
CC
     group-based vaccines has several advantages over traditional vaccines,
CC
     particularly when compared to the use of whole antigens in vaccine
CC
     compositions. There is evidence that the immune response to whole
CC
     antigens is directed largely toward variable regions of the antigen,
CC
     allowing for immune escape due to mutations. The groups for inclusion in
CC
```

```
an group-based vaccine may be selected from conserved regions of viral or
     tumour-associated antigens, which therefore reduces the likelihood of
CC
     escape mutants. Furthermore, immunosuppressive groups that may be present
CC
     in whole antigens can be avoided with the use of group-based vaccines. An
CC
     additional advantage of an group-based vaccine approach is the ability to
CC
     combine selected groups (CTL and HTL), and further, to modify the
CC
     composition of the groups, achieving, for example, enhanced
CC
     immunogenicity. Accordingly, the immune response can be modulated, as
CC
     appropriate, for the target disease. Similar engineering of the response
CC
     is not possible with traditional approaches. ABP11501 to ABP25412
CC
     represent peptide sequences used in the exemplification of the present
CC
     invention. (Updated on 11-SEP-2003 to standardise OS field)
CC
XX
SO
     Sequence 11 AA;
                                  Score 4; DB 4; Length 11;
  Query Match
                          36.4%;
                          100.0%; Pred. No. 1.2e+03;
  Best Local Similarity
             4; Conservative
                                0; Mismatches 0; Indels
                                                                  0; Gaps
                                                                              0;
  Matches
            6 GNSS 9
Qу
              1111
            4 GNSS 7
Db
RESULT 10
ABB74319
     ABB74319 standard; peptide; 11 AA.
ID
XX
AC
     ABB74319;
XX
     18-APR-2002 (first entry)
DT
XX
     Simple nuclear localisation signal peptide SEQ ID NO:83.
DE
XX
     Fusogenic; nuclear localisation signal; NLS; encapsulation; lipogene;
KW
     liposome; micelle; karyophilic; cytostatic; antitumour; solid tumour;
KW
     peptide-lipid-polynucleotide complex; neoplastic disease; gene therapy;
KW
     breast carcinoma; prostate carcinoma.
KW
XX
OS
     Synthetic.
XX
ΡN
     WO200193836-A2.
XX
PD-
     13-DEC-2001.
XX
ΡF
     08-JUN-2001; 2001WO-US018657.
XX
     09-JUN-2000; 2000US-0210925P.
PR
XX
     (BOUL/) BOULIKAS T.
PA
XX
PI
     Boulikas T;
XX
DR
     WPI; 2002-164295/21.
XX
     Encapsulation of plasmid DNA (Lipogenes) and therapeutic agents with
PT
     nuclear localization signal/fusogenic peptide conjugates into targeted
PT
```

CC

```
liposome complexes.
PT
XX
     Claim 14; Page 57; 107pp; English.
PS
XX
     The present invention describes a method for producing micelles with
CC
     entrapped therapeutic agents. The method comprises: (1) combining
CC
     negatively charged agent with a cationic lipid in a ratio where 30-90 %
CC
     of the negatively charged atoms are neutralised by positive charges on
CC
     lipid molecules to form an electrostatic micelle complex in 20-80 %
CC
     ethanol; and (2) combining the micelle complex of (a) with fusogenic-
CC
     karyophilic peptide conjugates in a 0.0-0.3 ratio, therefore producing
CC
     micelles with entrapped therapeutic agents. Also described is a method
CC
     for delivering a therapeutic agent in vivo, comprising the administration
CC
     of the micelle. ABB74256 to ABB74858 represent specifically claimed
CC
     nuclear localisation signal (NLS) peptides for use in the method as the
CC
     fusogenic-karyophilic peptides. The micelles produced can have cytostatic
CC
     and antitumour activities. The peptide-lipid-polynucleotide complexes
CC
     produced are useful for inhibiting the progression of neoplastic
CC
     diseases. The invention relates to the field of gene therapy and is
CC
     directed toward methods for producing peptide-lipid-polynucleotide
CC
     complexes suitable for delivery of polynucleotides. The encapsulated
CC
     molecules display therapeutic efficacy in eradicating solid tumours
CC
     including but not limited to breast carcinoma or prostate carcinoma.
CC
     ABB74235 to ABB74255 are used in the exemplification of the present
CC
CC
     invention
XX
SQ
     Sequence 11 AA;
                          36.4%; Score 4; DB 5; Length 11;
  Query Match
  Best Local Similarity
                          100.0%; Pred. No. 1.2e+03;
                                                                              0;
                                                   0; Indels
                                                                 0;
                                                                     Gaps
             4; Conservative
                               0; Mismatches
            3 SRKG 6
Qу
              1111
            4 SRKG 7
Db
RESULT 11
ABP99717
     ABP99717 standard; protein; 11 AA.
XX
AC
     ABP99717;
XX
DT-
     26-MAR-2003 (first entry)
XX
DΕ
     Human secreted protein SEQ ID NO 661.
XX
     Human; secreted protein; nootropic; neuroprotective; cytostatic;
KW
     virucide; dermatological; immunosuppressive; antiinflammatory; anti-HIV;
KW
     vulnerary; antibacterial; antiparkinsonian; antisickling; antianaemic;
KW
     antiarthritic; cancer; antirheumatic; hepatotropic; cerebroprotective;
KW
     antiinflammatory; antiallergic; antidiabetic; antiulcer; anticonvulsant;
KW
     antifungal; antiparasitic; cardiant; immune disorder; infection; vaccine;
KW
     cardiovascular disorder; neurological disease; nephrotropic;
KW
KW
     gene therapy.
XX
OS
     Homo sapiens.
```

```
XX
    WO200277186-A2.
PN
XX
     03-OCT-2002.
PD
XX
     26-MAR-2002; 2002WO-US009188.
PF
XX
     27-MAR-2001; 2001US-0278650P.
PR
     12-SEP-2001; 2001US-00950082.
PR
     12-SEP-2001; 2001US-00950083.
PR
XX
     (HUMA-) HUMAN GENOME SCI INC.
PA
XX
PI
     Rosen CA,
                Ruben SM;
XX
     WPI; 2003-040583/03.
DR
     N-PSDB; ABZ67138.
DR
XX
     New human secreted proteins encoded by genes contained in cDNA clones
PT
     (e.g. HGCAC19), useful for preventing, treating or diagnosing e.g. AIDS,
PT
     multiple sclerosis, herpes virus, leukemia, tick-borne encephalitis or
PT
PT
     West Nile fever.
XX
     Claim 1; Page 1462; 2423pp; English.
PS
XX
     The invention relates to novel human genes (ABZ66891-ABZ68209) and the
CC
     encoded secreted proteins (ABP99470-ABP99872) useful for preventing,
CC
     treating or ameliorating medical conditions e.g. by protein or gene
CC
     therapy. The genes are isolated from a range of human tissues disclosed
CC
     in the specification. The nucleic acids, proteins, antibodies and
CC
     (ant)agonists are useful in the diagnosis, treatment and prevention of:
CC
     (a) cancer, e.g. breast and ovarian cancer and other cancers of the
CC
     adrenal gland, bone, bone marrow, breast, gastrointestinal tract, liver,
CC
     lung or urogenital; (b) immune disorders e.g. Addison's disease,
CC
     allergies, autoimmune haemolytic anaemia, autoimmune thyroiditis,
CC
     diabetes mellitus, Crohn's disease, multiple sclerosis, rheumatoid
CC
     arthritis and ulcerative colitis; (c) cardiovascular disorders such as
CC
     myocardial ischaemias; (d) wound healing; (e) neurological diseases e.g.
CC
     cerebral anoxia and epilepsy; and (f) infectious diseases such as viral,
CC
     bacterial, fungal and parasitic infections
CC
XX
SO
     Sequence 11 AA;
  Query-Match-36.4%; Score-4; DB-6; Length-11;
                          100.0%; Pred. No. 1.2e+03;
  Best Local Similarity
                                                                             0;
                                                                 0; Gaps
                                                 0; Indels
  Matches
             4; Conservative
                                0; Mismatches
            8 SSLM 11
Qу
              1111
            3 SSLM 6
Db
RESULT 12
ABP72546
     ABP72546 standard; peptide; 11 AA.
XX
AC
     ABP72546;
```

```
XX
     29-MAY-2003
                 (first entry)
DT
XX
     Peptide encoded by cloning region of vector pGEX-3X.
DE
XX
     Vector; pGEX-3X; vasoactive intestinal peptide; bombesin; substance P;
ΚW
     epidermal growth factor; human; cancer; vaccine.
ΚW
XX
OS
     Synthetic.
XX
                     Location/Qualifiers
FH
     Key
FT
     Cleavage-site
                   1. .4
                     /note= "Factor Xa cleavage site"
FT
XX
     WO2003013426-A2.
PN
XX.
     20-FEB-2003.
PD
XX
     02-AUG-2002; 2002WO-US024561.
PF
XX
     03-AUG-2001; 2001US-0309975P.
PR
XX
PΑ
     (DABU-) DABUR RES FOUND.
     (CORD/) CORD J I.
PA
XX
     Mukherjee R, Rao MRS,
                             Burman AC,
                                         Thomas B, Prasad S,
PΙ
XX
     WPI; 2003-256477/25.
DR
     N-PSDB; ABZ81613.
DR
XX
     New multivalent vaccine comprising vasoactive intestinal peptide,
PT
     Bombesin, Substance P and epidermal growth factor peptides, useful for
PT
     preventing or treating cancer.
PT
XX
     Example 2; Fig 5; 61pp; English.
PS
XX
     The present sequence is the peptide encoded by the cloning/expression
CC
     region of vector plasmid pGEX-3X. This prokaryotic expression vector
CC
     provides protein expression as a C-terminal fusion with glutathione
CC
     transferase, which enables purification of the protein on a glutathione-
CC
     Sepharose column. In the present invention, the target gene for cloning
CC
     was a synthetic gene (see ABZ70689) encoding a multivalent polypeptide
CC
     (see ABP72533) comprising vasoactive intestinal peptide, bombesin,
CC
     substance P-and epidermal-growth-factor-joined-via-glycine-glycine-
CC-
     linkers. This is useful as a multivalent vaccine for the prevention and
CC
     treatment of e.g. colon, rectum, lung, breast, brain, pancreas, prostate,
CC
     liver, gastrointestinal, thyroid, ovary, head and neck, and kidney
CC
     cancers, melanoma, neuroblastoma, glioblastoma, leukaemia and lymphoma
CC
XX
SQ
     Sequence 11 AA;
  Query Match
                           36.4%; Score 4; DB 6; Length 11;
                           100.0%; Pred. No. 1.2e+03;
  Best Local Similarity
                                                                               0;
                                                       Indels
                                                                  0; Gaps
                                 0; Mismatches
                                                    0;
  Matches
             4; Conservative
Qу
```

CC

```
RESULT 13
ABR01199
     ABR01199 standard; peptide; 11 AA.
ID
     ABR01199;
AC
XX
     12-MAY-2003 (first entry)
DT
XX
     Human gene 253-encoded secreted protein HOUED72, SEQ ID NO:680.
DΕ
XX
     Human; secreted protein; cancer; tumour; hyperproliferative disorder;
KW
     autoimmune disorder; inflammation; angiogenic diseases; AIDS;
KW
     acquired immunodeficiency syndrome; hepatitis; anaemia; wound healing;
KW
     drug screening; chromosome identification; chromosome mapping;
KW
     cytostatic; gene therapy; antiinflammatory; immunomodulator; anti-HIV;
KW \times
KW
     antianaemic; vulnerary.
XX
OS
     Homo sapiens.
XX
     WO200277013-A2.
PN
XX
PD
     03-OCT-2002.
XX
     26-MAR-2002; 2002WO-US009370.
PF
XX
PR
     27-MAR-2001; 2001US-0278650P.
     12-SEP-2001; 2001US-00950082.
PR
     12-SEP-2001; 2001US-00950083.
PR
XX
PA
     (HUMA-) HUMAN GENOME SCI INC.
XX
PI
     Rosen CA,
               Ruben SM;
XX
     WPI; 2003-040578/03.
DR
     N-PSDB: ABZ73533.
DR
XX
     New human secreted proteins and nucleic acids, useful for detecting or
PT
     treating cancer or other hyperproliferative disorders, autoimmune
PT
     disorders, inflammatory disorders, HIV disease, hepatitis or anemia.
PT
XX
     Claim-13; Page-1460; 2474pp; English.
PS-
XX
```

ABZ73281-ABZ73697 represent cDNAs corresponding to 391 human secreted protein genes, and ABP00947-ABP01363 represent the proteins they encode. ABZ73698-ABZ74687 represent human secreted protein genomic fragments. The invention also encompasses antibodies specific for the secreted proteins, the use of the secreted proteins in drug screening and recombinant vectors and host cells comprising a nucleic acid of the invention. The secreted proteins are thought to be involved in biological activities associated with cellular signalling, cellular differentiation, cell migration, prohormone activation and neurotransmitter activity. The secreted proteins, nucleic acids encoding them, antibodies or antibody fragments specific for the secreted proteins, and modulators of protein activity are useful for diagnosing or treating cancers or other

```
hyperproliferative disorders. Additionally, the secreted proteins and
CC
     their nucleic acids may also be used in the treatment of autoimmune
CC
     disorders, inflammatory disorders, diseases involving angiogenesis, AIDS
CC
     (acquired immunodeficiency syndrome), hepatitis, anaemia, and to promote
CC
     wound healing. Nucleic acids of the invention may be used for chromosome
CC
     identification, chromosome mapping, in gene therapy, for identifying
CC
     individuals from minute biological samples, as hybridisation probes, and
CC
     as molecular weight markers. The present sequence represents a human
CC
     secreted protein of the invention
CC
XX
     Sequence 11 AA;
SO
                          36.4%; Score 4; DB 6; Length 11;
  Query Match
                          100.0%; Pred. No. 1.2e+03;
  Best Local Similarity
                                 0; Mismatches
                                                                               0;
             4; Conservative
                                                    0;
                                                        Indels
                                                                      Gaps
  Matches
            8 SSLM 11
Qу
              1111
            3 SSLM 6
Db
RESULT 14
ADC22397
     ADC22397 standard; peptide; 11 AA.
ID
XX
AC
     ADC22397;
XX
DT
     18-DEC-2003 (first entry)
XX
     Nuclear localisation signal motif amino acid sequence SEQ ID NO:246.
DE
XX
     recombinant fusion protein; fusion protein; binding; detection;
KW
KW
     localisation domain; binding domain;
KW
     subcellular compartment localisation.
XX
OS
     Unidentified.
XX
PN
     W02003012068-A2.
XX
PD
     13-FEB-2003.
XX
PF
     01-AUG-2002; 2002WO-US024572.
XX
PR-
     01-AUG-2001; 2001US-0309395P.
PR
     13-DEC-2001; 2001US-0341589P.
XX
     (CELL-) CELLOMICS INC.
PA
XX
     Bright G, Premkumar DR,
                                Chen Y;
PΙ
XX
     WPI; 2003-248174/24.
DR
XX
     New recombinant fusion protein comprising detection and first
PT
     localization domains and a binding domain for the molecule of interest,
PT
     useful for detecting binding of a molecule of interest.
PT
XX
     Claim 20; SEQ ID NO 246; 101pp; English.
PS
```

```
The present invention describes a recombinant fusion protein (I) for
CC
    detecting binding of a molecule of interest. (I) comprises: (a) a
CC
     detection domain; (b) a first localisation domain; and (c) a binding
CC
     domain for the molecule of interest. The detection domain, the first
CC
     localisation domain and the binding domain for the molecule of interest
CC
     constituting the recombinant fusion protein for detecting binding of a
CC
     molecule of interest are operably linked. The binding domain for the
CC
    molecule of interest is separated from the first localisation domain by 0
CC
     -20 amino acid residues. The first localisation domain and the binding
CC
     domain for the molecule of interest both do not occur in a single non-
CC
     recombinant protein with the same spacing as in the recombinant fusion
CC
     protein for detecting binding of a molecule of interest. Also described:
CC
     (1) a recombinant nucleic acid encoding the recombinant fusion protein;
CC
     (2) a recombinant expression vector comprising the nucleic acid control
CC
     sequences operably linked to the recombinant nucleic acid molecule; (3) a
CC
     genetically engineered host cell transfected with the recombinant
CC
     expression vector; (4) a kit for detecting binding of the molecule of
CC
CC
     interest; and (5) a method for identifying compounds that alter the
CC
     binding of the molecule of interest. The recombinant fusion protein is
     useful for detecting binding of a molecule of interest. The recombinant
CC
CC
     fusion protein eliminates the need to construct two or more chimeric
CC
     proteins and enables the monitoring of biochemical events in live, intact
     or fixed cells. The present sequence is used in the exemplification of
CC
CC
     the present invention.
XX
SQ
     Sequence 11 AA;
                          36.4%; Score 4; DB 7; Length 11;
  Query Match
                          100.0%; Pred. No. 1.2e+03;
  Best Local Similarity
                                                      Indels
                                                                  0; Gaps
                                                                              0;
             4; Conservative
                                 0; Mismatches
                                                   0;
            3 SRKG 6
Qу
              1111
            4 SRKG 7
Db
RESULT 15
AAP50987
     AAP50987 standard; peptide; 11 AA.
XX
     AAP50987;
AC
XX
     -25-MAR-2003---(-revi-sed)--
DT-
                 (first entry)
DT
     08-MAR-1992
XX
DE
     FTS-derived peptide.
XX
     Serum thymus factor; FTS.
KW
XX
OS
     Synthetic.
XX
PN
     JP60089499-A.
XX
PD
     20-MAY-1985.
XX
                    83JP-00196079.
PF
     21-OCT-1983;
```

XX

```
XX
     21-OCT-1983;
                   83JP-00196079.
PR
XX
     (MITH ) MITSUI PHARM INC.
PΑ
XX
    WPI; 1985-156917/26.
DR
XX
    New peptide for use in analysis - derived from lysine, tyrosine, glycine,
PT
     alanine, serine and asparagine units.
PT
XX
     Claim 1; Page 1; 12pp; Japanese.
PS
XX
     The peptide is derived from FTS (Pyr-Ala-Lys-Ser-Gln-Gly-Gly-Ser-Asn). It
CC
     has similar activity to FTS and can be easily labelled with radioactive
CC
     iodide for use in RIA. See also AAP50412 and AAP50413. (Updated on 25-MAR
CC
CC
    -2003 to correct PR field.)
XX
     Sequence 11 AA;
SQ
                          27.3%; Score 3; DB 1; Length 11;
 Query Match
                          100.0%; Pred. No. 1.3e+04;
  Best Local Similarity
           3; Conservative 0; Mismatches 0; Indels
                                                                 0; Gaps
                                                                             0;
 Matches
            1 AKS 3
Qy
              111
            4 AKS 6
Db
RESULT 16
AAP50941
    AAP50941 standard; peptide; 11 AA.
XX
AC
     AAP50941;
XX
DT
     25-MAR-2003 (revised)
DT
     06-OCT-1991 (first entry)
XX
     Hepatitis B virus (HBV) envelope protein pre-S gene peptide fragment.
DE
XX
     Immunogen; vaccine; antigen; epitope; diagnosis.
KW
XX
OS
     Hepatitis B virus.
XX
PN-
     EP154902-A.
XX
PD
     18-SEP-1985.
XX
                   85EP-00102250.
PF
     28-FEB-1985;
XX
                    84US-00587090.
     07-MAR-1984;
PR
                    85US-00698499.
     05-FEB-1985;
PR
                    86US-00856522.
PR
     28-APR-1986;
XX
     (CALY ) CALIFORNIA INST OF TECHN.
PA
     (NYBL-) NEW YORK BLOOD CENTER INC.
PA
XX
PΙ
     Neurath AR, Kent SBH;
```

```
XX
DR
     WPI; 1985-237979/39.
XX
     Pre-s gene coded hepatitis B immunogens - useful in in vaccines for
PT
     protection and as diagnostics for detection of antigens and antigens.
PT
XX
     Claim 30; Page 101; 140pp; English.
PS
XX
     The peptides of the invention are immunogens which, esp. when linked to
CC
     carriers, may be used in vaccines for conferring protection against HBV,
CC
     and in the diagnosis of viral conditions in man and animals and in the
CC
     detection of the antigens and antibodies. More specifically, the chain of
CC
     AAs is between sequence posn. pre-S 120-174. (Updated on 25-MAR-2003 to
CC
     correct PA field.)
CC
XX
SO
     Sequence 11 AA;
                          27.3%; Score 3; DB 1; Length 11;
  Query Match
                          100.0%; Pred. No. 1.3e+04;
  Best Local Similarity
                                                                              0;
             3; Conservative 0; Mismatches
                                                   0; Indels
                                                                  0; Gaps
            4 RKG 6
Qy
              Db
            9 RKG 11
RESULT 17
AAP82901
ID
     AAP82901 standard; protein; 11 AA.
XX
     AAP82901;
AC
XX
DT
     25-MAR-2003
                 (revised)
     10-MAR-2003
                 (revised)
DT
     17-DEC-2001
                  (revised)
DT
     23-NOV-1990
                 (first entry)
DT
XX
     Activated metalloproteinase CNBr cleavage product #2.
DE
XX
     metalloproteinase marker; basement membrane type IV collagen;
KW
     cancer metastases.
KW
XX
OS
     Homo sapiens.
XX
PN
     USN7196242-N.
XX
PD
     01-NOV-1988.
XX
                    88US-00196242.
PF
     20-MAY-1988;
XX
PR
     20-MAY-1988;
                    88US-00196242.
XX
     (USSH ) US DEPT HEALTH & HUMAN SERVICE.
PA
XX
PΙ
     Liotta LA, Stetlerste W, Krutzsch HC;
XX
DR
     WPI; 1988-360971/50.
```

```
XX
     Metallo:proteinase marker for cancer metastases - which cleaves basement
PT
     membrane type IV collagen but does not cleave types I, II or III
PT
PT
     collagen.
XX
     Disclosure; Page ?; 31pp; English.
PS
XX
     Recipient cells (e.g. rat embryo cell lines) transfected with the ras
CC
     oncogene secrete a metalloproteinase of mol wt 60-75kD. This enzyme
CC
     cleaves the pepsin resistant domain of basement membrane type IV collagen
CC
     but does not cleave native types I, II or III. This sequence is a
CC
     cyanogen bromide cleavage product of the activated form of the enzyme.
CC
     Metastatic cancer cells can be identified by the level of secretion of
CC
     the metalloproteinase. Affinity purified antibodies which recognise the N
CC
     -terminal 30 amino acid residues can distinguish the latent from the
CC
     activated proteinase. See also AAP82899-P82900 and AAP82902-P82903.
CC
     (Note: Revised entry submitted to correct the patent number format of US
CC
     Government-owned NTIS applications to prevent clashes with ongoing US
CC
     granted patent numbers. For further information please visit the Derwent
CC
     web site at www.derwent.com/dwpi/updates/ntis us.html.) (Updated on 10-
CC
     MAR-2003 to add missing OS field.) (Updated on 25-MAR-2003 to correct PA
CC
CC
     field.)
XX
SQ
     Sequence 11 AA;
                          27.3%; Score 3; DB 1; Length 11;
  Query Match
  Best Local Similarity 100.0%; Pred. No. 1.3e+04;
                                                                              0;
                                                   0; Indels
                                                                  0; Gaps
             3; Conservative 0; Mismatches
            6 GNS 8
QУ
              111
Db
            6 GNS 8
RESULT 18
AAP80854
ID
     AAP80854 standard; protein; 11 AA.
XX
AC
     AAP80854;
XX
DT
     15-JAN-1991 (first entry)
XX
     Sequence of N-terminal methionyl-porcine growth hormone encoded on
DE
DE-
     plasmid pGHX.1.
XX
KW
     Transgenic animal; somatotrophin.
XX
OS
     Sus scrofa.
XX
     W08808026-A.
PN
XX
PD
     20-OCT-1988.
XX
                    88WO-AU000109.
PF
     14-APR-1988;
XX
                    87AU-00001427.
PR
     14-APR-1987;
                    88AU-00017004.
PR
     17-APR-1987;
```

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10-NOV-1987;
                    87AU-00005326.
PR
XX
     (LUMI-) LUMINIS PTY LTD.
PA
XX
     Seamark RF,
                  Wells JR;
PΙ
XX
     WPI; 1988-307564/43.
DR
     N-PSDB; AAN80882, AAN80885, AAN80886, AAN80887, AAN80888.
DR
XX
     Creating new breed(s) of animals - by introducing a gene sample of a
PT
     hormone homologous with the ovum into the male nucleus of a fertilised
PΤ
PT
     ovum.
XX
     Example; Fig 6; 35pp; English.
PS
XX
     A method for creating new breeds of animals comprises (a) obtaining a
CC
     recently fertilised ovum, (b) isolating a gene sample of a characterising
CC
     hormone homologous with the ovum, (c) introducing the gene sample into
CC
     the male nucleus of the ovum prior to fusion with the female nucleus to
CC
CC
     form a single cell embryo and (d) subsequently implanting the ovum into a
CC
     suitably prepd. female animal. Also claimed is a plasmid expression
CC
     vector comprising a plasmid cloning vector including a first cloned
CC
     sequence of DNA encoding a non-porcine promoter region and a second
     cloned sequence encoding porcine growth hormone activity
CC
XX
SQ
     Sequence 11 AA;
                           27.3%; Score 3; DB 1; Length 11;
  Query Match
                          100.0%; Pred. No. 1.3e+04;
  Best Local Similarity
                                                                               0;
             3; Conservative
                               0; Mismatches
                                                    0; Indels
                                                                   0;
                                                                       Gaps
  Matches
            8 SSL 10
Qy
              \parallel \parallel \parallel
            8 SSL 10
Db
RESULT 19
AAP81302
     AAP81302 standard; protein; 11 AA.
XX
AC
     AAP81302;
XX
DT
     10-MAR-2003
                  (revised)
     23-NOV-1990 (first entry)
DT-
XX
     Atrial natriuretic polypeptide binding polypeptide T51.
DE
XX
     Diuretic; atrium cardis; atrial natriuretic peptide binding; T51;
KW
KW
     hypotensive action.
XX
OS
     Mammalia.
XX
PN
     JP63079598-A.
XX
PD
     09-APR-1988.
XX
PF
     22-SEP-1986;
                    86JP-00222192.
```

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XX
     22-SEP-1986;
                    86JP-00222192.
PR
XX
     (SUNR ) SUNTORY LTD.
PA
XX
     WPI; 1988-137132/20.
DR
XX
     Novel polypeptide, with diuretic action - is obtd. from atrium cardis of
PT
     mammals showing specific bond to atrial natriuretic polypeptide and gene
PT
     coding it.
PT
XX
     Claim 1; Page 2; 23pp; Japanese.
PS
XX
     Peptide binds to atrial natriuretic polypeptide (ANP) and has diuretic
CC
     (partic. natriuretic) and hypotensive action. See also AAN81690-93 and
CC
     AAP81282-P81309. (Updated on 10-MAR-2003 to add missing OS field.)
CC
XX
SQ
     Sequence 11 AA;
                          27.3%; Score 3; DB 1; Length 11;
  Query Match
                          100.0%; Pred. No. 1.3e+04;
  Best Local Similarity
                                                                               0;
  Matches
             3; Conservative
                               0; Mismatches
                                                   0;
                                                        Indels
                                                                   0; Gaps
            8 SSL 10
Qу
              \perp
            7 SSL 9
Db
RESULT 20
AAY07371
     AAY07371 standard; peptide; 11 AA.
XX
AC
     AAY07371;
XX
DT
     25-MAR-2003 (revised)
DT
     16-JUL-1999 (first entry)
XX
     Matrix metalloprotease antigenic peptide #8.
DE
XX
     Matrix metalloprotease; inhibitor; tissue damage; angiogenesis; antibody;
KW
     arthritis; tumour growth; granulomatous inflammatory condition; enzyme;
KW
     metastasis; sarcoidosis; antigen.
KW
XX
OS-
     Synthetic.
OS
     Homo sapiens.
XX
ΡN
     WO9010228-A.
XX
     07-SEP-1990.
PD
XX
                     89US-00317407.
PF
     01-MAR-1989;
XX
                     89US-00317407.
PR
     01-MAR-1989;
                     90US-00488460.
PR
     26-FEB-1990;
XX
      (USDC ) US SEC OF COMMERCE.
PA
      (USSH ) NAT INST OF HEALTH.
PA
```

```
XX
     Liotta LA, Stetlerste W, Krutzsh H;
PI
XX
     WPI; 1990-290458/38.
DR
XX
     Matrix metallo:proteinase peptide(s) - used to inhibit enzyme in treating
PT
     tissue damage caused by activated enzyme.
PT
XX
     Example 3; Page 34; 61pp; English.
PS
XX
     This sequence represents an antigenic peptide derived from a human type
CC
     IV matrix metalloprotease (MMP) protein. The invention relates to MMP
CC
     inhibitor peptides which can be used to treat tissue damage caused by
CC
     activated MMPs, e.g. for treating inappropriate angiogenesis, arthritis,
CC
     tumour growth, invasion and metastasis and granulomatous inflammatory
CC
     conditions such as sarcoidosis. Also antibodies to the peptides can be
CC
     used to detect the MMPs and can distinguish activated from latent enzyme.
CC
     (Updated on 25-MAR-2003 to correct PR field.) (Updated on 25-MAR-2003 to
CC
     correct PA field.) (Updated on 25-MAR-2003 to correct PI field.)
CC
XX
SO
     Sequence 11 AA;
  Query Match
                          27.3%; Score 3; DB 2; Length 11;
                          100.0%; Pred. No. 1.3e+04;
  Best Local Similarity
                                                                              0;
                                0; Mismatches
                                                   0; Indels
                                                                 0; Gaps
             3; Conservative
            6 GNS 8
Qу
              111
            6 GNS 8
Db
RESULT 21
AAR07165
     AAR07165 standard; protein; 11 AA.
ID
XX
AC
     AAR07165;
XX
     24-JAN-1991 (first entry)
DT
XX
     Synthetic Nerve growth factor (NGF) peptide fragment.
DE
XX
     Nervous disorders; Alzheimer's disease; Parkinson's disease; stroke.
KW
XX
OS-
     Synthetic.
XX
PN
     WO9010644-A.
XX
     20-SEP-1990.
PD
XX
PF
     14-MAR-1989;
                    89SE-00000899.
XX
                    89SE-00000899.
PR
     14-MAR-1989;
XX
PA
     (LOPE-) LOPE MED AB.
XX
     Olson L, Persson H, Ebendal T;
PΙ
XX
```

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WPI; 1990-304983/40.
DR
XX
    New peptide fragments of nerve growth factor or its precursor - used to
PT
     raise specific antibodies for immunoassay, esp. for brain tissue.
PT
XX
     Disclosure; Page 11; 24pp; English.
PS
XX
     Peptides are Abs raised to them are useful in detecting the presence of
CC
    NGF and precursors, allowing early diagnosis and treatment of nervous
CC
    disorders eg. Alzheimer's and Parkinson's disease, spinal cord injury,
CC
     stroke etc. Peptide corresponds to AAs 111 to 120 of rat NGF
CC
XX
     Sequence 11 AA;
SQ
  Query Match
                          27.3%; Score 3; DB 2; Length 11;
  Best Local Similarity
                          100.0%; Pred. No. 1.3e+04;
                                0; Mismatches
                                                   0; Indels
                                                                      Gaps
                                                                              0;
 Matches
             3; Conservative
            3 SRK 5
Qу
              III
            4 SRK 6
Dh
RESULT 22
AAR10045
    AAR10045 standard; protein; 11 AA.
ID
XX
AC
     AAR10045;
XX
DT
     27-AUG-2003
                  (revised)
DT
     25-MAR-2003
                  (revised)
DT
     09-JAN-2003
                  (revised)
DT
     14-MAR-1991
                  (first entry)
XX
     N-terminal fusion of VP2 to hexapeptide.
DE
XX
     VP2 protein; infectious bursal disease virus; poultry vaccine.
KW
XX
     Infectious bursal disease virus.
os
XX
                     Location/Qualifiers
FH
                     7. .11
FT
     Peptide
FT
                     /label= VP2 peptide
XX
PN
     WO9015140-A.
XX
PD
     13-DEC-1990.
XX
PF
     30-MAY-1989;
                    89AU-00004469.
XX
     30-MAY-1989;
                    89AU-00004469.
PR
XX
     (CSIR ) COMMONWEALTH SCI & IND RES ORG.
PA
XX
     Azad AA, Macreadie JG, Mckern NM, Vaughan PR, Jagadish MN;
PI
     Fahey KJ, Chapman JJ, Heine HG;
PI
XX
```

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N-PSDB; AAQ10155.
DR
XX
     Highly immunogenic VP2 protein - of infectious bursal disease virus,
PT
     useful in vaccine compsn. for immunisation against the disease in
PT
     poultry.
PT
XX
     Disclosure; Page 31; 70pp; English.
PS
XX
     This sequence comprises the region encompassing the N-terminal fusion of
CC
     a vector (pIP201) hexapeptide prod. and the N-terminal Met and residues -
CC
     1(Thr) - 5(Asp) of the VP2 protein. The resultant prod. constitutes a
CC
     highly immunogenic form of VP2. A hybrid VP2 can also be constructed,
CC
     having an N-terminal from one strain of IBDV and a C- terminal from
CC
     another strain of IBDV. The proteins can be used in vaccines against IBDV
CC
CC
     disease in poultry. See also AAQ10373. (Updated on 09-JAN-2003 to add
     missing OS field.) (Updated on 25-MAR-2003 to correct PA field.) (Updated
CC
     on 25-MAR-2003 to correct PI field.) (Updated on 27-AUG-2003 to correct
CC
CC
     OS field.)
XX
SQ
     Sequence 11 AA;
                          27.3%; Score 3; DB 2; Length 11;
  Query Match
                          100.0%; Pred. No. 1.3e+04;
  Best Local Similarity
  Matches
             3; Conservative
                                 0; Mismatches
                                                    0; Indels
                                                                      Gaps
                                                                              0;
            7 NSS 9
Qу
              | | | |
           2 NSS 4
Db
RESULT 23
AAR14094
ID
     AAR14094 standard; protein; 11 AA.
XX
AC
     AAR14094;
XX
DТ
     25-MAR-2003 (revised)
DT
     04-DEC-1991 (first entry)
XX
     Pre-S(1-11) immunogenic peptide based on HBV subtype adw2.
DE
XX
KW
     hepatitis B virus; vaccine; liposome-peptide complex.
XX
OS
     Synthetic.
XX
PN
     EP448126-A.
XX
     25-SEP-1991.
PD
XX
PF
     28-FEB-1985;
                    91EP-00105948.
XX
PR
     07-MAR-1984;
                    84US-00587090.
                    85US-00698499.
PR
     05-FEB-1985;
XX
     (NYBL-) NEW YORK BLOOD CENTER INC.
PA
PΑ
     (CALY ) CALIFORNIA INST OF TECHN.
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WPI; 1991-007210/01.

DR

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XX
     Neurath AR,
                  Kent SBH;
PΙ
XX
     WPI; 1991-283144/39.
DR
XX
     Synthetic lipid vesicle carrier linked to pre-S gene coded peptide - the
PT
     peptide is a hepatitis B immunogen, vaccine or diagnostic.
PΤ
XX
     Disclosure; Page 13; 54pp; English.
PS
XX
     This peptide is one of ten preferred HBV antigenic sequences which are
CC
     suitable for attachment to lipid vesicles for use as vaccines. The lipid
CC
     vesicle carrier is stabilised by cross-linking and has covalently bonded
CC
     sites on its outer surface to bind the peptide. See AAR14086-R14095.
CC
     (Updated on 25-MAR-2003 to correct PF field.) (Updated on 25-MAR-2003 to
CC
CC
     correct PA field.)
XX
     Sequence 11 AA;
SQ
                          27.3%; Score 3; DB 2; Length 11;
  Query Match
  Best Local Similarity
                          100.0%; Pred. No. 1.3e+04;
  Matches
             3; Conservative
                               0; Mismatches
                                                   0;
                                                        Indels
                                                                  0; Gaps
                                                                              0;
            4 RKG 6
Qу
              111
            9 RKG 11
Db
RESULT 24
AAR44308
     AAR44308 standard; protein; 11 AA.
XX
AC
     AAR44308;
XX
DT
     20-DEC-1993 (first entry)
XX
     Ballast constituent in pINT90d pro-insulin fusion protein.
DE
XX
     Fusion protein; ballast constituent; monkey pro-insulin; increased;
KW
     recombinant protein production; HMG CoA reductase;
KW
     human 3-hydroxy-3-methylglutaryl-coenzyme A-reductase.
KW
XX
OS
     Synthetic.
XX
ΡN
     US5227293-A.
XX
PD
     13-JUL-1993.
XX
PF
     23-APR-1992;
                    92US-00838221.
XX
                    89US-00399874.
PR
     29-AUG-1989;
                    90WO-US004840.
     28-AUG-1990;
PR
XX
PΑ
     (GEHO ) GEN HOSPITAL CORP.
     (FARH ) HOECHST AG.
PΑ
XX
     Stengelin S, Ulmer W, Habermann P,
                                            Uhlmann E,
PI
```

```
XX
DR
     WPI: 1991-102070/14.
     N-PSDB; AAQ51807.
DR
XX
     Prepn. of fusion proteins contg. ballast constituent and protein - giving
PT
     prods. which are protease resistant or insoluble.
PT
XX
     Example 17; Col 7-8; 22pp; English.
PS
XX
     Sequence AAR44308 is an example of a specific ballast constituent peptide
CC
     which corresponds to a preferred generic coding sequence. The invention
CC
     covers fusion proteins in which a short ballast constituent is fused to a
CC
     desired protein, esp. to modified pro- insulin, to increase recombinant
CC
     production of the protein. See AAR44301-R44312
CC
XX
SQ
     Sequence 11 AA;
                          27.3%; Score 3; DB 2; Length 11;
  Query Match
  Best Local Similarity
                          100.0%; Pred. No. 1.3e+04;
                                                                              0;
             3; Conservative 0; Mismatches
                                                  0; Indels
                                                                  0; Gaps
            6 GNS 8
Qу
              III
Db
            7 GNS 9
RESULT 25
AAR31358
ID
     AAR31358 standard; peptide; 11 AA.
XX
AC
     AAR31358;
XX
DT
     25-MAR-2003
                 (revised)
     20-MAY-1998 (first entry)
DT
XX
     Antimicrobial peptide #12 derived from bovine lactoferrin.
DE
XX
     antimicrobial agent; iron-binding protein; athlete's foot; mastitis;
KW
KW
     antibacterial agent.
XX
OS
     Synthetic.
XX
PN
     EP503939-A1.
XX
PD
     16-SEP-1992.
XX
                    92EP-00302125.
PF
     12-MAR-1992;
XX
                    91JP-00048196.
PR
     13-MAR-1991;
     24-APR-1991;
                    91JP-00094492.
PR
     24-APR-1991;
                    91JP-00094493.
PR
XX
     (MORG ) MORINAGA MILK IND CO LTD.
PA
XX
     Tomita M, Kawase K, Takase M, Bellamy WR, Yamauchi K;
PΙ
PΙ
     Wakabayashi H, Tokita Y;
XX
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WPI; 1992-310006/38.
DR
XX
     New antimicrobial peptide(s) - active against e.g. Listeria
PT
     monocytogenes, Staphylococcus aureus, Pseudomonas aeruginosa and
PT
     Klebsiella pneumoniae, for treating e.g. diarrhoea, mastitis, etc.
PT
XX
     Claim 8; Page 17; 19pp; English.
PS
XX
     This synthetic peptide has a sequence derived from bovine lactoferrin.
CC
     The peptide has stronger antimicrobial activity than unhydrolysed
CC
     lactoferrin and improved heat resistance. The peptide had a minimum
CC
     inhibitory concentration (microM) of 1.5, 3, 6 and 25 against Listeria
CC
     monocytogenes, Staphylococcus aureus, Pseudomonas aeruginosa and
CC
     Klebsiella pneumoniae, respectively. This and other peptides derived from
CC
     hydrolysed lactoferrin can be incorporated into foods, human or
CC
     veterinary compositions (e.g. for treating mastitis and athlete's foot),
CC
     toiletries, cosmetics, cleaning agents, etc. See AAR31350-R31361.
CC
     (Updated on 25-MAR-2003 to correct PN field.)
CC
XX
     Sequence 11 AA;
SQ
                          27.3%; Score 3; DB 2; Length 11;
  Query Match
                          100.0%; Pred. No. 1.3e+04;
  Best Local Similarity
                                                                              0;
             3; Conservative
                                 0; Mismatches
                                                    0;
                                                        Indels
                                                                  0; Gaps
  Matches
            2 KSR 4
Qy
              111
            1 KSR 3
Db
RESULT 26
AAR24850
     AAR24850 standard; protein; 11 AA.
XX
AC
     AAR24850;
XX
DT
     25-MAR-2003
                  (revised)
DT
     08-DEC-1992
                  (first entry)
XX
DΕ
     Weight regulating peptide 33.
XX
KW
     Amphetamine; appetite suppressor.
XX
OS-
     Synthetic.
XX
                     Location/Qualifiers
FH
     Key
     Misc-difference 2
FT
                     /label= GLY, ALA, VAL, LEU, SER, THR, CYS, MET, ASP, GLU,
FT
                     ASN, GLN, LYS, HIS, ARG, PHE, TYR, TRP, PRO, OTHER
FT
                     /note= "cystine, hydroxylysine, hydroxyproline"
FT
FT
     Misc-difference 3
                     /label= GLY, ALA, VAL, LEU, SER, THR, CYS, MET, ASP, GLU,
FT
                     ASN, GLN, LYS, HIS, ARG, PHE, TYR, TRP, PRO, OTHER
FT
                     /note= "cystine, hydroxylysine, hydroxyproline"
FT
XX
PN
     WO9209296-A1.
```

XX

```
11-JUN-1992.
PD
XX
PF
     20-NOV-1991;
                    91WO-US008497.
XX
     21-NOV-1990;
                    90US-00616910.
PR
XX
     (GEOU ) UNIV GEORGETOWN.
PA
XX
PΙ
     Fleming PJ,
                  Kent UM;
XX
     WPI; 1992-216791/26.
DR
XX
     New dodeca:peptide cpds. - used for regulating wt. gain in mammals or for
PΤ
     producing antibodies for attenuating such effects.
PT
XX
     Disclosure; Page 10; 34pp; English.
PS
XX
     The sequences given in AAR24818-61 are new peptides which comprise at
CC
     least 6 amino acids from the sequence given in AAR24814. The remaining
CC
     amino acids are each Gly, Ala, Val, Leu, Ser, Thr, Cys, cystine, Met,
CC
     Asp, Glu, Asn, Gln, Lys, hydroxylysine, His, Arg, Phe, Tyr, Trp, Pro or
CC
     hydroxyproline. These peptides used for the regulation of weight gain in
CC
     mammals and can be used instead of amphetamine, which is largely used as
CC
     an appetite suppressor. These peptides can also be used to prepare
CC
     antibodies. Such antibodies can be used to attenuate the effect of the
CC
     peptides in a host or to detect, quantify or purify the peptides.
CC
     (Updated on 25-MAR-2003 to correct PN field.)
CC
XX
SQ
     Sequence 11 AA;
                          27.3%; Score 3; DB 2; Length 11;
  Query Match
                          100.0%; Pred. No. 1.3e+04;
  Best Local Similarity
                                                                  0; Gaps
                                                                              0;
                               0; Mismatches
                                                   0; Indels
             3; Conservative
            4 RKG 6
Qy
              111
            4 RKG 6
Db
RESULT 27
AAR28088
     AAR28088 standard; protein; 11 AA.
XX
AC-
    -AAR28088;-
XX
DT
     25-MAR-2003 (revised)
DT
     27-NOV-1992
                 (first entry)
XX
     Cell-to-cell binding inhibiting peptide subunit (13).
DE
XX
KW
     Adhesion; integrin; multimer.
XX
OS
     Synthetic.
XX
                     Location/Qualifiers
FH
     Key
                     6. .11
FT
     Cross-links
                     /note= "sequence linked by interchain amide bond at Lys
FT
```

```
position to Glu residue on Arg5-Glu-Ser-Arg-Gly-Asp-Val
FT
                     sequence (see AAR28087)"
FT
XX
     WO9208476-A1.
PN
XX
PD
     29-MAY-1992.
XX
     07-NOV-1991;
                    91WO-US008328.
ΡF
XX
PR
     07-NOV-1990;
                    90US-00610363.
XX
     (SCRI ) SCRIPPS RES INST.
PΑ
XX
     Ruggeri ZM,
                 Houghten RA;
PΙ
XX
     WPI; 1992-199940/24.
DR
XX
     Peptides inhibiting binding of adhesion mols. to cells expressing
PT
     integrins - for treating and preventing thrombus formation and diseases
PT
     associated with platelet aggregation.
PT
XX
     Disclosure; Page 37-38; 70pp; English.
PS
XX
     A peptide which inhibits binding of adhesion mols. to cells expressing
CC
     integrins comprises two subunits having the sequences given in AAR28087-
CC
     88, held together by an interchain stable bond. The sequence RGD is in
CC
     each of the subunits. (Updated on 25-MAR-2003 to correct PN field.)
CC
XX
SQ
     Sequence 11 AA;
                          27.3%; Score 3; DB 2; Length 11;
  Query Match
  Best Local Similarity
                          100.0%; Pred. No. 1.3e+04;
             3; Conservative
                                0; Mismatches
                                                    0; Indels
                                                                  0; Gaps
                                                                              0;
  Matches
            2 KSR 4
Qу
              111
Db
            6 KSR 8
RESULT 28
AAR25763
     AAR25763 standard; protein; 11 AA.
ID
XX
AC
     AAR25763;
XX
DT
     25-MAR-2003 (revised)
DT
     15-JAN-1993 (first entry)
XX
     Histone H2B peptide - N-Ac-[Lupus 2'(2-12)]-CONH2.
DΕ
XX
     Autoimmune; systemic lupus erythematosus; SLE; antibody; domain.
KW
XX
OS
     Synthetic.
XX
FH
                     Location/Qualifiers
     Kev
FT
     Modified-site
                     /note= "N-terminal is acetylated"
FT
```

```
Modified-site
                     11
FT
                     /note= "C-terminal is amidated"
FT
XX
     WO9211029-A1.
PN
XX
     09-JUL-1992.
PD
XX
     17-DEC-1991;
                    91WO-US009176.
PF
XX
                    90US-00628858.
     17-DEC-1990;
PR
XX
     (UYJO ) UNIV JOHNS HOPKINS.
PΑ
XX
                  Dintzis RZ, Blodgett JK, Cheronis JC;
PI
     Dintzis HM,
     Kirschenheuter G;
PΙ
XX
DR
     WPI; 1992-249851/30.
XX
     Suppression of undesired immune responses using an antigenic construct -
PT
     for treating pollen allergies and auto:immune diseases e.g. multiple
PT
PT
     sclerosis, Myasthenia Gravis.
XX
     Example 3; Page 71; 230pp; English.
PS
XX
     In order to suppress the autoimmune response to histone H2B that occurs
CC
     in the (NZBxNZW) F, murine model of systemic lupus erythematosus (SLE),
CC
     the antibody binding domain(s) of histone H2B had to be identified. It is
CC
     known that removal of the H2B N-terminal region with trypsin results in a
CC
     loss of antigenicity (Portanova, J.P., et al., J. Immunol. 38, 446-457,
CC
     (1987)). Attention was therefore, foccussed on the synthesis of peptides
CC
     derived from this region of histone H2B. The peptides synthesised
CC
     together with their respective designations are represented in AAR25751-
CC
     65. The antiqen recognised by (NZBxNZW) F, mice was assigned as being
CC
     within H2B residues 3-12. (Updated on 25-MAR-2003 to correct PN field.)
CC
XX
SO
     Sequence 11 AA;
                          27.3%; Score 3; DB 2; Length 11;
  Query Match
                          100.0%; Pred. No. 1.3e+04;
  Best Local Similarity
                                0; Mismatches
                                                                  0; Gaps
                                                  0; Indels
  Matches
             3; Conservative
           - 1 AKS 3
Qу
              3-AKS-5-
RESULT 29
AAR27520
     AAR27520 standard; peptide; 11 AA.
ID
XX
AC
     AAR27520;
XX
DT
     25-MAR-2003
                  (revised)
     10-MAR-1993
                  (first entry)
DT
XX
     Effector cell protease receptor-1 derived peptide.
DE
XX
```

```
EPR-1; antibodies; chronic lymphocytic leukaemia; hairy cell leukaemia.
KW
XX
os
     Homo sapiens.
XX
     WO9216558-A1.
PN
XX
     01-OCT-1992.
PD
XX
                    92WO-US002109.
PF
     12-MAR-1992;
XX
     12-MAR-1991;
                    91US-00667957.
PR
XX
     (SCRI ) SCRIPPS RES INST.
PA
XX
     Altieri DC, Edgington TS;
PΙ
XX
     WPI; 1992-349160/42.
DR
XX
     Cell surface receptors homologous to coagulation factors V and VIII - for
PT
     monitoring the response to treatment of chronic lymphocytic leukaemia.
PT
XX
     Claim 1; Page 71; 83pp; English.
PS
XX
     The peptide is derived from effector cell protease receptor-1 (EPR-1)
CC
     Antibodies raised against it can be used for monitoring treament of
CC
     patients afflicted with chronic lymphocytic leukaemia, hairy cell
CC
     leukaemia and other diseases in which expression of receptors homologous
CC
     to coagulation factors V and VIII is correlated with the disease state.
CC
     The antibodies can also be used for detecting EPR-1 cell surface
CC
     receptors. See also AAR27515-R27521. (Updated on 25-MAR-2003 to correct
CC
CC
     PN field.)
XX
SQ
     Sequence 11 AA;
                          27.3%; Score 3; DB 2; Length 11;
  Query Match
                          100.0%; Pred. No. 1.3e+04;
  Best Local Similarity
                                                                              0;
                                                  0; Indels
                                                                  0; Gaps
  Matches
             3: Conservative 0; Mismatches
            6 GNS 8
Qу
              111
Db
            1 GNS 3
RESULT 30
AAR26085
     AAR26085 standard; peptide; 11 AA.
ΙD
XX
AC
     AAR26085;
XX
DΤ
     25-MAR-2003 (revised)
DT
     01-FEB-1993 (first entry)
XX
     Immunising peptide fragment #5 of T cell receptor.
DE
XX
     TCR; beta chain; rheumatoid arthritis; multiple sclerosis;
KW
     autoimmune disease; diabetes; T-cell lymphoma; vaccination; immunisation.
KW
XX
```

```
Synthetic.
OS
XX
    WO9212996-A2.
PN
XX
     06-AUG-1992.
PD
XX
                    92WO-US000482.
     21-JAN-1992;
PF
XX
                    91US-00644611.
     22-JAN-1991;
PR
XX
     (IMMU-) IMMUNE RESPONSE CORP.
₽A
XX
    Howell MD, Brostoff SW, Carlo DJ;
PI
XX
DR
     WPI; 1992-284600/34.
XX
     Treatment of auto:immune diseases e.g. rheumatoid arthritis - using
PT
     vaccine contg. T-cell receptors from surface of T-cells which mediate the
PT
PT
     diseases.
XX
PS
     Disclosure; Page 15; 87pp; English.
XX
CC
     This peptide fragment of the T-cell receptor is used as an immunising
     peptide as part of a vaccine used to control rheumatoid arthritis or
CC
     multiple sclerosis, but can also be used against other autoimmune
CC
     diseases (eg. diabetes) or T-cell lymphoma. The sequence is part of a
СC
     beta chain VDJ region. (Updated on 25-MAR-2003 to correct PN field.)
CC
XX
SQ
     Sequence 11 AA;
                          27.3%; Score 3; DB 2; Length 11;
  Query Match
                          100.0%; Pred. No. 1.3e+04;
  Best Local Similarity
                                                                               0;
                               0; Mismatches
                                                  0; Indels 0; Gaps
            3; Conservative
            8 SSL 10
Qу
              \mathbf{I} \mathbf{I} \mathbf{I}
            2 SSL 4
Db
RESULT 31
AAR26084
     AAR26084 standard; peptide; 11 AA.
XX
AC
     AAR26084;
XX
DT
     25-MAR-2003 (revised)
DT
     01-FEB-1993 (first entry)
XX
     Immunising peptide fragment #4 of T cell receptor.
DE
XX
     TCR; beta chain; rheumatoid arthritis; multiple sclerosis;
KW
     autoimmune disease; diabetes; T-cell lymphoma; vaccination; immunisation.
KW
XX
OS
     Synthetic.
XX
     WO9212996-A2.
PN
XX
```

```
06-AUG-1992.
PD
XX
                    92WO-US000482.
     21-JAN-1992;
PF
XX
     22-JAN-1991;
                    91US-00644611.
PR
XX
     (IMMU-) IMMUNE RESPONSE CORP.
PA
XX
     Howell MD, Brostoff SW, Carlo DJ;
PI
XX
     WPI: 1992-284600/34.
DR
XX
     Treatment of auto:immune diseases e.g. rheumatoid arthritis - using
PT
     vaccine contq. T-cell receptors from surface of T-cells which mediate the
PT
     diseases.
PT
XX
PS
     Disclosure; Page 15; 87pp; English.
XX
     This peptide fragment of the T-cell receptor is used as an immunising
CC
     peptide as part of a vaccine used to control rheumatoid arthritis or
CC
     multiple sclerosis, but can also be used against other autoimmune
CC
     diseases (eg. diabetes) or T-cell lymphoma. The sequence is part of a
CC
     beta chain VDJ region. (Updated on 25-MAR-2003 to correct PN field.)
CC
XX
SQ
     Sequence 11 AA;
                          27.3%; Score 3; DB 2; Length 11;
  Query Match
  Best Local Similarity
                          100.0%; Pred. No. 1.3e+04;
                                                                               0;
                                                                  0;
                                                                      Gaps
  Matches
             3; Conservative
                                  0; Mismatches
                                                    0;
                                                       Indels
            8 SSL 10
Qу
              111
Db
            2 SSL 4
RESULT 32
AAR26832
     AAR26832 standard; peptide; 11 AA.
ID
XX
AC
     AAR26832;
XX
DT
     20-MAY-1998
                 (first entry)
XX
DE-
     TY-11(6) FGF analogue.
XX
KW
     Fibroblast growth factor; DMSO oxidation; disulphide peptides;
     oxidative folding; dimethyl sulphoxide.
KW
XX
OS
     Synthetic.
XX
                      Location/Qualifiers
FH
FT
     disulfide bond
                     2. .7
                      /note= "bridge formed by DMSO oxidation"
FT
XX
PN
     US5144006-A.
XX
PD
     01-SEP-1992.
```

```
XX
PF
     13-JUN-1991;
                    91US-00714659.
XX
                    91US-00714659.
PR
     13-JUN-1991;
XX
     (UYRQ ) UNIV ROCKEFELLER.
PA
XX
PΙ
     Tam JP;
XX
     WPI; 1992-315567/38.
DR
XX
     Oxidative folding of peptide and protein substrates - using hydrocarbon
РΤ
     sulphoxide(s), e.g. DMSO, with wide pH and temp. range, for synthesis of
PT
     e.q. endothelin.
PT
XX
     Disclosure; Fig 1; 14pp; English.
PS
XX
     This peptide is one of a series of basic peptides derived from the
CC
     receptor-recognition site comprised of residues 100-115 of human basic
CC
     fibroblast growth factor. This highly basic and hydrophobic sequence
CC
     contained no cysteine but was converted to cysteinyl- containing
CC
     sequences so that the peptides could be used as models to show the
CC
     effectiveness of DMSO as an oxidising agent in the novel method. Using
CC
     20% DMSO in aq.soln. as the oxidative folding reagent, the disulphide
CC
     formation by DMSO oxidation was rapid in all the model peptides. The
CC
     optimal pH range for disulphide formation is 3-8, although this can be
CC
     extended to 2-10 with some substrates. The method can be used in the
CC
     synthesis of defensins (anti-microbials), endothelin and its precursor
CC
     big endothelin. See also AAR26833-R26840
CC
XX
SQ
     Sequence 11 AA;
                          27.3%; Score 3; DB 2; Length 11;
  Query Match
                          100.0%; Pred. No. 1.3e+04;
  Best Local Similarity
                                                                              0;
                                                                  0; Gaps
                                0; Mismatches
                                                    0; Indels
             3; Conservative
  Matches
            3 SRK 5
Qу
              III
            4 SRK 6
Db
RESULT 33
AAR26834
     -AAR26834-standard; peptide; 11 -AA.
XX
AC
     AAR26834;
XX
     20-MAY-1998 (first entry)
DT
XX
     CY-11(8) FGF analogue.
DE
XX
     Fibroblast growth factor; DMSO oxidation; disulphide peptides;
KW
     oxidative folding; dimethyl sulphoxide.
KW
XX
OS
     Synthetic.
XX
                     Location/Qualifiers
FH
     Key
```

```
disulfide bond
FT
                    1. .8
                     /note= "bridge formed by DMSO oxidation"
FT
XX
     US5144006-A.
PN
XX
     01-SEP-1992.
PD
XX
     13-JUN-1991;
                    91US-00714659.
PF
XX
                    91US-00714659.
     13-JUN-1991;
PR
XX
     (UYRQ ) UNIV ROCKEFELLER.
PΑ
XX
PI
     Tam JP;
XX
     WPI; 1992-315567/38.
DR
XX
     Oxidative folding of peptide and protein substrates - using hydrocarbon
PT
     sulphoxide(s), e.g. DMSO, with wide pH and temp. range, for synthesis of
PT
     e.g. endothelin.
PT
XX
     Disclosure; Fig 1; 14pp; English.
PS
XX
     This peptide is one of a series of basic peptides derived from the
CC
     receptor-recognition site comprised of residues 100-115 of human basic
CC
     fibroblast growth factor. This highly basic and hydrophobic sequence
CC
     contained no cysteine but was converted to cysteinyl- containing
CC
     sequences so that the peptides could be used as models to show the
CC
     effectiveness of DMSO as an oxidising agent in the novel method. Using
CC
     20% DMSO in aq.soln. as the oxidative folding reagent, the disulphide
CC
     formation by DMSO oxidation was rapid in all the model peptides. The
CC
     optimal pH range for disulphide formation is 3-8, although this can be
CC
     extended to 2-10 with some substrates. The method can be used in the
CC
     synthesis of defensins (anti-microbials), endothelin and its precursor
CC
     big endothelin. See AAR26832-R26840
CC
XX
SQ
     Sequence 11 AA;
                          27.3%; Score 3; DB 2; Length 11;
  Query Match
                          100.0%; Pred. No. 1.3e+04;
  Best Local Similarity
                                                                              0;
                                                                  0; Gaps
             3; Conservative 0; Mismatches
                                                    0; Indels
            3 SRK 5
Qу
              -|-|-
Db
            4 SRK 6
RESULT 34
     AAR26833 standard; peptide; 11 AA.
ID
XX
AC
     AAR26833;
XX
                 (first entry)
DT
     20-MAY-1998
XX
DΕ
     CY-11(7) FGF analogue.
XX
```

```
Fibroblast growth factor; DMSO oxidation; disulphide peptides;
KW
KW
     oxidative folding; dimethyl sulphoxide.
XX
     Synthetic.
OS
XX
                     Location/Qualifiers
FH
     Key
     disulfide bond
                     1. .7
FT
                     /note= "bridge formed by DMSO oxidation"
FT
XX
     US5144006-A.
PN
XX
PD
     01-SEP-1992.
XX
     13-JUN-1991;
                    91US-00714659.
PF
XX
PR
     13-JUN-1991;
                    91US-00714659.
XX
PA
     (UYRQ ) UNIV ROCKEFELLER.
XX
PΙ
     Tam JP;
XX
DR
     WPI; 1992-315567/38.
XX
     Oxidative folding of peptide and protein substrates - using hydrocarbon
PT
     sulphoxide(s), e.g. DMSO, with wide pH and temp. range, for synthesis of
PT
PT
     e.g. endothelin.
XX
     Disclosure; Fig 1; 14pp; English.
PS
XX
     This peptide is one of a series of basic peptides derived from the
CC
     receptor-recognition site comprised of residues 100-115 of human basic
CC
     fibroblast growth factor. This highly basic and hydrophobic sequence
CC
     contained no cysteine but was converted to cysteinyl- containing
CC
     sequences so that the peptides could be used as models to show the
CC
     effectiveness of DMSO as an oxidising agent in the novel method. Using
CC
     20% DMSO in aq.soln. as the oxidative folding reagent, the disulphide
CC
     formation by DMSO oxidation was rapid in all the model peptides. The
CC
     optimal pH range for disulphide formation is 3-8, although this can be
CC
     extended to 2-10 with some substrates. The method can be used in the
CC
     synthesis of defensins (anti-microbials), endothelin and its precursor
CC
     big endothelin. See also AAR26833-R26840
CC
XX
SO
    Sequence 11 AA;
                          27.38;
                                  Score 3; DB 2; Length 11;
  Query Match
                          100.0%; Pred. No. 1.3e+04;
  Best Local Similarity
                                                                              0;
                                                                  0; Gaps
             3: Conservative
                               0; Mismatches
                                                    0; Indels
  Matches
            3 SRK 5
Qy
              111
Db
            4 SRK 6
RESULT 35
AAR26835
     AAR26835 standard; peptide; 11 AA.
ΙD
```

XX

```
AAR26835;
AC
XX
     20-MAY-1998 (first entry)
DT
XX
     CY-11(9) FGF analogue.
DΕ
XX
     Fibroblast growth factor; DMSO oxidation; disulphide peptides;
KW
     oxidative folding; dimethyl sulphoxide.
KW
XX
     Synthetic.
OS
XX
                     Location/Qualifiers
FΗ
     Kev
                     1. .9
FT
     disulfide bond
                     /note= "bridge formed by DMSO oxidation"
FT
XX
PN
     US5144006-A.
XX
PD
     01-SEP-1992.
XX
     13-JUN-1991;
                    91US-00714659.
PF
XX
PR
     13-JUN-1991;
                    91US-00714659.
XX
PΑ
     (UYRQ ) UNIV ROCKEFELLER.
XX
PΙ
     Tam JP;
XX
DR
     WPI; 1992-315567/38.
XX
     Oxidative folding of peptide and protein substrates - using hydrocarbon
PT
     sulphoxide(s), e.g. DMSO, with wide pH and temp. range, for synthesis of
PT
PT
     e.q. endothelin.
XX
     Disclosure; Fig 1; 14pp; English.
PS
XX
     This peptide is one of a series of basic peptides derived from the
CC
     receptor-recognition site comprised of residues 100-115 of human basic
CC
     fibroblast growth factor. This highly basic and hydrophobic sequence
CC
     contained no cysteine but was converted to cysteinyl- containing
CC
     sequences so that the peptides could be used as models to show the
CC
     effectiveness of DMSO as an oxidising agent in the novel method. Using
CC
     20% DMSO in aq.soln. as the oxidative folding reagent, the disulphide
CC
     formation by DMSO oxidation was rapid in all the model peptides. The
CC
     optimal-pH-range-for-disulphide-formation-is-3-8, although-this-can-be-
CC
     extended to 2-10 with some substrates. The method can be used in the
CC
     synthesis of defensins (anti-microbials), endothelin and its precursor
CC
     big endothelin. See AAR26832-R26840
CC
XX
SQ
     Sequence 11 AA;
                          27.3%; Score 3; DB 2; Length 11;
  Query Match
                          100.0%; Pred. No. 1.3e+04;
  Best Local Similarity
                                0; Mismatches
                                                    0; Indels
                                                                  0; Gaps
                                                                              0;
  Matches
             3; Conservative
            3 SRK 5
Qу
              | | |
Db
            4 SRK 6
```

```
RESULT 36
AAR36904
     AAR36904 standard; peptide; 11 AA.
XX
     AAR36904;
AC
XX
     25-MAR-2003
DT
                  (revised)
     02-SEP-1993
                  (first entry)
DT
XX
     Insulin-like growth factor-II functional derivative.
DE
XX
     IGF-II; disorder; treatment; survival; retinal neuronal cells; promotion;
KW
     injury; ageing; disease; photodegeneration; trauma; axotomy;
ΚW
     neurotoxic-excitatory degeneration; diabetic retinopathy;
     ischemic neuronal degeneration; inherited retinal dystrophy;
KW
     Alzheimer's disease; infantile malignant osteopetrosis; cholestasis;
KW
KW
     ceroid-lipofuscosis; cyclic.
XX
OS
     Homo sapiens.
XX
FH
                     Location/Qualifiers
     Kev
FT
     Disulfide-bond 1. .11
XX
PN
     WO9308826-A1.
XX
     13-MAY-1993.
PD
XX
     03-NOV-1992;
                    92WO-US009443.
PF
XX
                    91US-00790690.
PR
     08-NOV-1991;
                    92US-00963329.
     15-OCT-1992;
PR
XX
     (CEPH-) CEPHALON INC.
PΑ
XX
     Bozyczko-Coyne D, Neff N, Lewis ME, Iqbal M;
PI
XX
     WPI; 1993-167389/20.
DR
XX
     Use of IGF-I or IGF-II or their functional derivs. - for treating
PT
     disorders characterised by death and/or dysfunction of retinal cells.
PT
XX
     Example; Page-69; 97pp; English.
PS-
XX
     The sequence is that of a functional derivative of human insulin-like
CC
     growth factor (IGF)-II which promotes the survival of retinal neuronal
CC
     cells. It can be used for the treatment of retinal neuronal tissues which
CC
     are suffering from the effects of injury, ageing and/or disease such as
CC
CC
     photodegeneration, trauma, axotomy, neurotoxic-excitatory degeneration,
CC
     ischemic neuronal degeneration, inherited retinal dystrophy, diabetic
     retinopathy, Alzheimer's disease, infantile malignant osteopetrosis,
CC
CC
     ceroid lipofuscosis or cholestasis. (Updated on 25-MAR-2003 to correct PN
CC
     field.)
XX
SQ
     Sequence 11 AA;
```

```
100.0%; Pred. No. 1.3e+04;
  Best Local Similarity
                                                                              0;
            3; Conservative 0; Mismatches
                                                   0; Indels
                                                                  0; Gaps
 Matches
            1 AKS 3
Qy
             111
            7 AKS 9
Db
RESULT 37
AAR36924
    AAR36924 standard; peptide; 11 AA.
XX
AC
    AAR36924;
XX
DT
     25-MAR-2003
                 (revised)
     02-SEP-1993
                 (first entry)
DT
XX
     Insulin-like growth factor-II functional derivative.
DE
XX
     IGF-II; disorder; treatment; survival; retinal neuronal cells; promotion;
KW
     injury; ageing; disease; photodegeneration; trauma; axotomy;
KW
     neurotoxic-excitatory degeneration; diabetic retinopathy;
KW
     ischemic neuronal degeneration; inherited retinal dystrophy;
KW
     Alzheimer's disease; infantile malignant osteopetrosis; cholestasis;
KW
     ceroid-lipofuscosis; cyclic.
KW
XX
OS
     Synthetic.
XX
     WO9308826-A1.
PN
XX
     13-MAY-1993.
PD
XX
                    92WO-US009443.
PF
     03-NOV-1992;
XX
PR
     08-NOV-1991;
                    91US-00790690.
PR
     15-OCT-1992;
                    92US-00963329.
XX
     (CEPH-) CEPHALON INC.
PA
XX
PΙ
     Bozyczko-Coyne D, Neff N, Lewis ME,
XX
DR
     WPI; 1993-167389/20.
XX
     Use of IGF-I or IGF-II or their functional derivs. - for treating
PT
     disorders characterised by death and/or dysfunction of retinal cells.
PT
XX
     Example; Page 76; 97pp; English.
PS
XX
     The sequence is that of a functional derivative of human insulin-like
CC
     growth factor (IGF)-II which promotes the survival of retinal neuronal
CC
     cells. It can be used for the treatment of retinal neuronal tissues which
CC
     are suffering from the effects of injury, ageing and/or disease such as
CC
     photodegeneration, trauma, axotomy, neurotoxic-excitatory degeneration,
CC
     ischemic neuronal degeneration, inherited retinal dystrophy, diabetic
CC
     retinopathy, Alzheimer's disease, infantile malignant osteopetrosis,
CC
     ceroid lipofuscosis or cholestasis. (Updated on 25-MAR-2003 to correct PN
CC
```

27.3%; Score 3; DB 2; Length 11;

Query Match

```
XX
     Sequence 11 AA;
SQ
                          27.3%; Score 3; DB 2; Length 11;
 Query Match
                          100.0%; Pred. No. 1.3e+04;
  Best Local Similarity
                                                                              0;
             3; Conservative
                               0; Mismatches
                                                   0; Indels
                                                                  0; Gaps
 Matches
            1 AKS 3
Qy
              \Pi
            8 AKS 10
RESULT 38
AAR36905
     AAR36905 standard; peptide; 11 AA.
XX
AC
     AAR36905;
XX
DT
     25-MAR-2003
                  (revised)
DT
     02-SEP-1993
                  (first entry)
XX
DE
     Insulin-like growth factor-II functional derivative.
XX
     IGF-II; disorder; treatment; survival; retinal neuronal cells; promotion;
KW
     injury; ageing; disease; photodegeneration; trauma; axotomy;
KW
     neurotoxic-excitatory degeneration; diabetic retinopathy;
KW
     ischemic neuronal degeneration; inherited retinal dystrophy;
KW
     Alzheimer's disease; infantile malignant osteopetrosis; cholestasis;
KW
     ceroid-lipofuscosis; cyclic.
KW
XX
OS
     Homo sapiens.
XX
                     Location/Qualifiers
FH
     Disulfide-bond 1. .11
FT
XX
     WO9308826-A1.
PN
XX
PD
     13-MAY-1993.
XX
     03-NOV-1992;
                    92WO-US009443.
PF
XX
                    91US-00790690.
PR
     08-NOV-1991;
     -15-0CT-1992;---92US-00963329.
PR-
XX
PA
     (CEPH-) CEPHALON INC.
XX
     Bozyczko-Coyne D, Neff N, Lewis ME, Iqbal M;
PΙ
XX
     WPI; 1993-167389/20.
DR
XX
     Use of IGF-I or IGF-II or their functional derivs. - for treating
PT
     disorders characterised by death and/or dysfunction of retinal cells.
PT
XX
PS
     Example; Page 70; 97pp; English.
XX
     The sequence is that of a functional derivative of human insulin-like
CC
```

CC

field.)

```
growth factor (IGF)-II which promotes the survival of retinal neuronal
CC
     cells. It can be used for the treatment of retinal neuronal tissues which
CC
     are suffering from the effects of injury, ageing and/or disease such as
CC
     photodegeneration, trauma, axotomy, neurotoxic-excitatory degeneration,
CC
     ischemic neuronal degeneration, inherited retinal dystrophy, diabetic
CC
     retinopathy, Alzheimer's disease, infantile malignant osteopetrosis,
CC
     ceroid lipofuscosis or cholestasis. (Updated on 25-MAR-2003 to correct PN
CC
CC
     field.)
XX
SQ
     Sequence 11 AA;
                          27.3%; Score 3; DB 2; Length 11;
  Query Match
                          100.0%; Pred. No. 1.3e+04;
  Best Local Similarity
                                0; Mismatches
                                                                  0; Gaps
                                                                              0;
             3; Conservative
                                                    0; Indels
            1 AKS 3.
Qу
              | | | |
            7 AKS 9
Db
RESULT 39
AAR36894
     AAR36894 standard; peptide; 11 AA.
XX
AC
     AAR36894;
XX
DT
     25-MAR-2003 (revised)
                  (first entry)
DT
     02-SEP-1993
XX
     Insulin-like growth factor-II functional derivative.
DE
XX
     IGF-II; disorder; treatment; survival; retinal neuronal cells; promotion;
ΚW
     injury; ageing; disease; photodegeneration; trauma; axotomy;
KW
     neurotoxic-excitatory degeneration; diabetic retinopathy;
KW
     ischemic neuronal degeneration; inherited retinal dystrophy;
KW
     Alzheimer's disease; infantile malignant osteopetrosis; cholestasis;
KW
KW
     ceroid-lipofuscosis; cyclic.
XX
OS
     Homo sapiens.
XX
FH
     Kev
                     Location/Qualifiers
FT
     Disulfide-bond 1. .11
FT
     Misc-difference 3
FT-
                     /note=-"D-form"-
XX
PN
     WO9308826-A1.
XX
PD
     13-MAY-1993.
XX
PF
     03-NOV-1992;
                     92WO-US009443.
XX
                     91US-00790690.
PR
     08-NOV-1991;
     15-OCT-1992;
                     92US-00963329.
PR
XX
PA
      (CEPH-) CEPHALON INC.
XX
     Bozyczko-Coyne D, Neff N, Lewis ME, Iqbal M;
PΙ
```

```
XX
    WPI; 1993-167389/20.
DR
XX
     Use of IGF-I or IGF-II or their functional derivs. - for treating
PT
     disorders characterised by death and/or dysfunction of retinal cells.
PT
XX
     Example; Page 66; 97pp; English.
PS
XX
     The sequence is that of a functional derivative of human insulin-like
CC
     growth factor (IGF)-II which promotes the survival of retinal neuronal
CC
     cells. It can be used for the treatment of retinal neuronal tissues which
CC
     are suffering from the effects of injury, ageing and/or disease such as
CC
     photodegeneration, trauma, axotomy, neurotoxic-excitatory degeneration,
CC
     ischemic neuronal degeneration, inherited retinal dystrophy, diabetic
CC
     retinopathy, Alzheimer's disease, infantile malignant osteopetrosis,
CC
     ceroid lipofuscosis or cholestasis. (Updated on 25-MAR-2003 to correct PN
CC
     field.)
CC
XX
SO
     Sequence 11 AA;
  Query Match
                          27.3%; Score 3; DB 2; Length 11;
                          100.0%; Pred. No. 1.3e+04;
  Best Local Similarity
                                                                               0;
  Matches
             3; Conservative
                                0; Mismatches
                                                    0;
                                                       Indels
                                                                      Gaps
            1 AKS 3
Qу
              +111
            7 AKS 9
Db
RESULT 40
AAR36917
     AAR36917 standard; peptide; 11 AA.
ID
XX
AC
     AAR36917;
XX
DT
     25-MAR-2003
                  (revised)
DT
     02-SEP-1993
                  (first entry)
XX
     Insulin-like growth factor-II functional derivative.
DE
XX
     IGF-II; disorder; treatment; survival; retinal neuronal cells; promotion;
KW
     injury; ageing; disease; photodegeneration; trauma; axotomy;
KW
     neurotoxic-excitatory degeneration; diabetic retinopathy;
KW
     ischemic-neuronal-degeneration; inherited-retinal-dystrophy;
KW-
     Alzheimer's disease; infantile malignant osteopetrosis; cholestasis;
KW
KW
     ceroid-lipofuscosis; cyclic.
XX
OS
     Synthetic.
XX
     WO9308826-A1.
PN
XX
PD
     13-MAY-1993.
XX
     03-NOV-1992;
                    92WO-US009443.
PF
XX
                    91US-00790690.
PR
     08-NOV-1991;
                    92US-00963329.
PR
     15-OCT-1992;
```

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XX
     (CEPH-) CEPHALON INC.
PΑ
XX
     Bozyczko-Coyne D, Neff N, Lewis ME, Iqbal M;
PΙ
XX
     WPI; 1993-167389/20.
DR
XX
     Use of IGF-I or IGF-II or their functional derivs. - for treating
PT
     disorders characterised by death and/or dysfunction of retinal cells.
PT
XX
PS
     Example; Page 74; 97pp; English.
XX
     The sequence is that of a functional derivative of human insulin-like
CC
     growth factor (IGF)-II which promotes the survival of retinal neuronal
CC
     cells. It can be used for the treatment of retinal neuronal tissues which
CC
CC
     are suffering from the effects of injury, ageing and/or disease such as
     photodegeneration, trauma, axotomy, neurotoxic-excitatory degeneration,
CC
     ischemic neuronal degeneration, inherited retinal dystrophy, diabetic
CC
     retinopathy, Alzheimer's disease, infantile malignant osteopetrosis,
CC
     ceroid lipofuscosis or cholestasis. (Updated on 25-MAR-2003 to correct PN
CC
     field.)
CC
XX
SQ
     Sequence 11 AA;
                          27.3%; Score 3; DB 2; Length 11;
  Query Match
  Best Local Similarity 100.0%; Pred. No. 1.3e+04;
                                                                              0;
                                 0; Mismatches
                                                    0; Indels
                                                                  0; Gaps
  Matches
             3; Conservative
            1 AKS 3
Qу
              111
            8 AKS 10
Db
RESULT 41
AAR36874
     AAR36874 standard; peptide; 11 AA.
XX
AC
     AAR36874;
XX
DT
     25-MAR-2003
                  (revised)
DT
     02-SEP-1993
                  (first entry)
XX
     Insulin-like growth factor-I functional derivative.
DΕ
XX
     IGF-I; disorder; treatment; survival; retinal neuronal cells; promotion;
KW
     injury; ageing; disease; photodegeneration; trauma; axotomy;
KW
     neurotoxic-excitatory degeneration; diabetic retinopathy;
KW
     ischemic neuronal degeneration; inherited retinal dystrophy;
KW
     Alzheimer's disease; infantile malignant osteopetrosis; cholestasis;
KW
     ceroid-lipofuscosis; loop peptide.
KW
XX
OS
     Homo sapiens.
XX
     W09308826-A1.
PN
XX
PD
     13-MAY-1993.
XX
```

```
03-NOV-1992;
                    92WO-US009443.
PF
XX
                    91US-00790690.
     08-NOV-1991;
PR
     15-OCT-1992;
                    92US-00963329.
PR
XX
     (CEPH-) CEPHALON INC.
PΑ
XX
     Bozyczko-Coyne D, Neff N, Lewis ME, Iqbal M;
PΙ
XX
     WPI; 1993-167389/20.
DR
XX
     Use of IGF-I or IGF-II or their functional derivs. - for treating
PT
     disorders characterised by death and/or dysfunction of retinal cells.
PT
XX
     Example; Page 60; 97pp; English.
PS
XX
     The sequence is that of a functional derivative of human insulin-like
CC
     growth factor (IGF)-I which promotes the survival of retinal neuronal
CC
     cells. It can be used for the treatment of retinal neuronal tissues which
CC
     are suffering from the effects of injury, ageing and/or disease such as
CC
     photodegeneration, trauma, axotomy, neurotoxic-excitatory degeneration,
CC
     ischemic neuronal degeneration, inherited retinal dystrophy, diabetic
CÇ
     retinopathy, Alzheimer's disease, infantile malignant osteopetrosis,
CC
     ceroid lipofuscosis or cholestasis. (Updated on 25-MAR-2003 to correct PN
CC
CC
     field.)
XX
SQ
     Sequence 11 AA;
  Query Match
                          27.3%; Score 3; DB 2; Length 11;
                          100.0%; Pred. No. 1.3e+04;
  Best Local Similarity
                                                                  0; Gaps
                                                                              0;
                                0; Mismatches
                                                   0; Indels
           3; Conservative
            1 AKS 3
Qy
              \mathbf{I}
            7 AKS 9
Db
RESULT 42
AAR36914
     AAR36914 standard; peptide; 11 AA.
XX
AC
     AAR36914;
XX
DT-
     25-MAR-2003—(revised)
DT
     02-SEP-1993
                  (first entry)
XX
     Insulin-like growth factor-II functional derivative.
DE
XX
     IGF-II; disorder; treatment; survival; retinal neuronal cells; promotion;
KW
     injury; ageing; disease; photodegeneration; trauma; axotomy;
KW
     neurotoxic-excitatory degeneration; diabetic retinopathy;
KW
     ischemic neuronal degeneration; inherited retinal dystrophy;
KW
     Alzheimer's disease; infantile malignant osteopetrosis; cholestasis;
KW
     ceroid-lipofuscosis; cyclic.
KW
XX
OS
     Synthetic.
XX
```

```
WO9308826-A1.
PN
XX
     13-MAY-1993.
PD
XX
                    92WO-US009443.
     03-NOV-1992;
PF
XX
                    91US-00790690.
     08-NOV-1991;
PR
     15-OCT-1992;
                    92US-00963329.
PR
XX
     (CEPH-) CEPHALON INC.
PA
XX
     Bozyczko-Coyne D, Neff N, Lewis ME, Iqbal M;
PΙ
XX
     WPI; 1993-167389/20.
DR
XX
PT
     Use of IGF-I or IGF-II or their functional derivs. - for treating
     disorders characterised by death and/or dysfunction of retinal cells.
PT
XX
     Example; Page 73; 97pp; English.
PS
XX
     The sequence is that of a functional derivative of human insulin-like
CC
     growth factor (IGF)-II which promotes the survival of retinal neuronal
CC
     cells. It can be used for the treatment of retinal neuronal tissues which
CC
     are suffering from the effects of injury, ageing and/or disease such as
CC
     photodegeneration, trauma, axotomy, neurotoxic-excitatory degeneration,
CC
     ischemic neuronal degeneration, inherited retinal dystrophy, diabetic
CC
     retinopathy, Alzheimer's disease, infantile malignant osteopetrosis,
CC
     ceroid lipofuscosis or cholestasis. (Updated on 25-MAR-2003 to correct PN
CC
CC
     field.)
XX
     Sequence 11 AA;
SQ
                          27.3%; Score 3; DB 2; Length 11;
  Query Match
                          100.0%; Pred. No. 1.3e+04;
  Best Local Similarity
                                                                              0;
             3; Conservative 0; Mismatches
                                                   0; Indels
                                                                  0; Gaps
Matches
           1 AKS 3
Qу
              \pm 111
            8 AKS 10
Db
RESULT 43
AAR42959
    AAR42959 standard; peptide; 11 AA.
XX
AC
     AAR42959;
XX
DT
     14-MAY-2003
                  (revised)
     25-MAR-2003
                  (revised)
DT
     08-DEC-1993 (first entry)
DT
XX
     Beta chain VDJ region (Vbeta3-Jbeta1.1).
DE
XX
     CDR; T-cell receptor; TCR; vaccine.
KW
XX
OS
     Synthetic.
XX
```

```
WO9312814-A2.
РN
XX
     08-JUL-1993.
PD
XX
     21-DEC-1992;
                    92WO-US011159.
PF
XX
                    91US-00813867.
     24-DEC-1991;
PR
XX
     (IMMU-) IMMUNE RESPONSE CORP.
PΑ
XX
     Howell MD, Brostoff SW, Carlo DJ;
PΙ
XX
     WPI; 1993-227059/28.
DR
XX
     Vaccine comprising T cell receptor from T cells which mediate pathology -
PT
     for treating and preventing T cell lymphoma, rheumatoid arthritis,
PТ
     auto:immune diseases etc.
PT
XX
     Claim 13; Page 73; 79pp; English.
PS
XX
     A vaccine for preventing or treating a T-cell mediated pathology in a
CC
     vertebrate comprises a medium and a pure T-cell receptor (TCR) or
CC
     immunogenic fragment corresp. to a TCR present on the surface of T- cells
CC
     mediating the pathology. The immunogenic fragment may comprise the amino
CC
     acid sequence of a beta-chain variable region, pref. the CD2 region (see
CC
     Features Table of AAR38720-22). Alternatively the fragment may comprise
CC
     the amino acid sequence of a beta-chain VDJ region of the TCR. The beta-
CC
     chain VDJ region may comprise the sequences given in AAR42956-61.
CC
     (Updated on 25-MAR-2003 to correct PN field.) (Updated on 14-MAY-2003 to
CC
     correct PS field.)
CC
XX
SQ
     Sequence 11 AA;
                          27.3%; Score 3; DB 2; Length 11;
  Query Match
                          100.0%; Pred. No. 1.3e+04;
  Best Local Similarity
                                                   0; Indels
                                                                      Gaps
                                                                              0;
                                0; Mismatches
             3; Conservative
  Matches
            8 SSL 10
Qу
              2 SSL 4
Db
RESULT 44
AAR42956-
     AAR42956 standard; peptide; 11 AA.
ID
XX
AC
     AAR42956;
XX
DT
     14-MAY-2003
                  (revised)
     25-MAR-2003
                  (revised)
DT
DT
     08-DEC-1993
                  (first entry)
XX
     Beta chain VDJ region (Vbeta14-Jbeta2.1).
DΕ
XX
KW
     CDR; T-cell receptor; TCR; vaccine.
XX
OS
     Synthetic.
```

```
XX
     WO9312814-A2.
PN
XX
     08-JUL-1993.
PD
XX
     21-DEC-1992;
                    92WO-US011159.
PF
XX
     24-DEC-1991;
                    91US-00813867.
PR
XX
     (IMMU-) IMMUNE RESPONSE CORP.
PΑ
XX
     Howell MD, Brostoff SW, Carlo DJ;
PΙ
XX
DR
     WPI; 1993-227059/28.
XX
     Vaccine comprising T cell receptor from T cells which mediate pathology -
PT
     for treating and preventing T cell lymphoma, rheumatoid arthritis,
PT
     auto:immune diseases etc.
PТ
XX
     Claim 12; Page 73; 79pp; English.
PS
XX
     A vaccine for preventing or treating a T-cell mediated pathology in a
CC
     vertebrate comprises a medium and a pure T-cell receptor (TCR) or
CC
     immunogenic fragment corresp. to a TCR present on the surface of T- cells
CC
     mediating the pathology. The immunogenic fragment may comprise the amino
CC
     acid sequence of a beta-chain variable region, pref. the CD2 region (see
CC
     Features Table of AAR38720-22). Alternatively the fragment may comprise
CC
     the amino acid sequence of a beta-chain VDJ region of the TCR. The beta-
CC
     chain VDJ region may comprise the sequences given in AAR42956-61.
CC
     (Updated on 25-MAR-2003 to correct PN field.) (Updated on 14-MAY-2003 to
CC
CC
     correct PS field.)
XX
SO
     Sequence 11 AA;
                          27.3%; Score 3; DB 2; Length 11;
  Query Match
                          100.0%; Pred. No. 1.3e+04;
  Best Local Similarity
                                                                  0; Gaps
                                                                              0;
             3; Conservative 0; Mismatches 0;
                                                        Indels
            8 SSL 10
Qу
              \perp
            2 SSL 4
RESULT 45
AAR32352
     AAR32352 standard; peptide; 11 AA.
ID
XX
AC
     AAR32352;
XX
DT
     05-JUL-1993 (first entry)
XX
DE
     Human Factor X peptide.
XX
     Anticoagulant; intrinsic; extrinsic; prothrombin activation; thrombin;
KW
     formation; Factor Xa; pathway mediated activation; inhibition.
KW
XX
OS
     Synthetic.
```

```
XX
     US5187155-A.
PN
XX
     16-FEB-1993.
PD
XX
                    89US-00371561.
     23-JUN-1989;
PF
XX
     23-JUN-1989;
                    89US-00371561.
PR
XX
     (TEXA ) UNIV TEXAS SYSTEM.
PA
XX
     Fair DS;
PΙ
XX
     WPI; 1993-075751/09.
DR
XX
     Compsns. comprising peptide(s) of 10-50 aminoacid residues - inhibit
PT
     factor X activation and/or Factor Xa function, useful for preventing
PT
     blood clot formation and treating deep vein thrombosis, pulmonary
PT
РT
     embolism, etc.
XX
PS
     Example; Page 6; 23pp; English.
XX
     The sequence is that of a peptide corresponding to amino acids 404-414 of
CC
     the human factor X molecule which was tested for its effect, (as a % of
CC
     the control rate), on the rate of Factor Xa formation and on the rate of
CC
     thrombin formation. The results obtd. were for activation of Factor \boldsymbol{X} by
CC
     the extrinsic activation complex 78%, by the intrinsic activation complex
CC
     98%, and activation by RVV-X, 76%. For the rate of thrombin formation the
CC
CC
     rate was 88% as compared to the control rate
XX
SQ
     Sequence 11 AA;
                           27.3%; Score 3; DB 2; Length 11;
  Query Match
                           100.0%; Pred. No. 1.3e+04;
  Best Local Similarity
                                                                       Gaps
                                                                               0;
                                 0; Mismatches
                                                    0; Indels
                                                                   0;
  Matches
             3; Conservative
            4 RKG 6
Qy
              111
Db
            2 RKG 4
RESULT 46
AAR43594
    -AAR43594-standard; peptide; 11 AA.
XX
AC
     AAR43594;
XX
DT
     25-MAR-2003
                   (revised)
DT
     10-MAY-1994
                  (first entry)
XX
     Peptide derived from insulin-like growth factor.
DE
XX
     IGF; IGF-II; neuronal cell survival; neurite regeneration; stroke;
KW
     epilepsy; Parkinson's disease; head injury; spinal cord injury;
KW
KW
     age- related neuronal loss; amylotropic lateral sclerosis.
XX
OS
     Synthetic.
```

```
XX
     WO9320836-A1.
PN
XX
     28-OCT-1993.
PD
XX
                    93WO-US003515.
     14-APR-1993;
ΡF
XX
                    92US-00869913.
     15-APR-1992;
PR
     07-OCT-1992;
                    92US-00958903.
PR
XX
     (CEPH-) CEPHALON INC.
PA
XX
                Kauer JC, Smith KR, Callison KV, Baldino F, Neff N;
PΙ
     Lewis ME,
ΡI
     Iqbal M;
XX
DR
     WPI; 1993-351361/44.
XX
     Peptide(s) derived from insulin-like growth factor - used for promoting
PT
     neuronal cell survival and neurite regeneration, partic. in treating
PT
     diseases e.g. stroke, epilepsy, Parkinson's, etc.
PT
XX
     Claim 12; Page 77; 119pp; English.
PS
XX
     The sequence is that of a fragment of insulin-like growth factor II (IGF-
CC
     II). The synthetic peptide can be used to enhance the survival of
CC
     neuronal cells in a mammal that are at risk of dying or to treat a head
СC
     or spinal cord injury, or to enhance neurite regeneration in a mammal, or
CC
     to treat stroke, epilepsy, age-related neuronal loss, amylotropic lateral
CC
     sclerosis and Parkinson's disease. See also AAR43590-645. (Updated on 25-
CC
     MAR-2003 to correct PN field.)
CC
XX
     Sequence 11 AA;
SO
                          27.3%; Score 3; DB 2; Length 11;
  Query Match
                          100.0%; Pred. No. 1.3e+04;
  Best Local Similarity
                                0; Mismatches
                                                                  0; Gaps
                                                                              0;
                                                  0; Indels
  Matches
             3; Conservative
            1 AKS 3
Qу
              \perp
Db
            8 AKS 10
RESULT 47
AAR43598
ID
     AAR43598 standard; peptide; 11 AA.
XX
AC
     AAR43598;
XX
DT
     25-MAR-2003
                   (revised)
     10-MAY-1994
                  (first entry)
DT
XX
     Peptide derived from insulin-like growth factor.
DΕ
XX
     IGF; IGF-II; neuronal cell survival; neurite regeneration; stroke;
KW
     epilepsy; Parkinson's disease; head injury; spinal cord injury;
KW
     age- related neuronal loss; amylotropic lateral sclerosis; cyclic.
KW
XX
```

```
Synthetic.
OS
XX
                     Location/Qualifiers
FH
FT
     Disulfide-bond 1. .11
XX
    WO9320836-A1.
PN
XX
     28-OCT-1993.
PD
XX
                    93WO-US003515.
     14-APR-1993;
PF
XX
     15-APR-1992;
                    92US-00869913.
PR
                    92US-00958903.
     07-OCT-1992;
PR
XX
PA
     (CEPH-) CEPHALON INC.
XX
               Kauer JC, Smith KR, Callison KV, Baldino F, Neff N;
PΙ
     Lewis ME,
PI
     Iqbal M;
XX
     WPI; 1993-351361/44.
DR
XX
     Peptide(s) derived from insulin-like growth factor - used for promoting
PT
     neuronal cell survival and neurite regeneration, partic. in treating
PT
PT
     diseases e.g. stroke, epilepsy, Parkinson's, etc.
XX
PS
     Claim 15; Page 79; 119pp; English.
XX
     The sequence is that of a fragment of insulin-like growth factor II (IGF-
CC
CC
     II). The synthetic peptide can be used to enhance the survival of
     neuronal cells in a mammal that are at risk of dying or to treat a head
CC
     or spinal cord injury, or to enhance neurite regeneration in a mammal, or
CC
     to treat stroke, epilepsy, age-related neuronal loss, amylotropic lateral
CC
     sclerosis and Parkinson's disease. See also AAR43590-645. (Updated on 25-
CC
     MAR-2003 to correct PN field.)
CC
XX
SQ Sequence 11 AA;
                          27.3%; Score 3; DB 2; Length 11;
  Query Match
                          100.0%; Pred. No. 1.3e+04;
  Best Local Similarity
  Matches 3; Conservative 0; Mismatches
                                                   0; Indels
                                                                 0; Gaps
                                                                             0;
            1 AKS 3
Qу
              \Pi
            7-AKS-9-
RESULT 48
AAR43618
     AAR43618 standard; peptide; 11 AA.
XX.
AC
     AAR43618;
XX
DT
     25-MAR-2003
                  (revised)
DT
     10-MAY-1994
                  (first entry)
XX
     Peptide derived from insulin-like growth factor.
DE
XX
```

```
IGF; IGF-II; neuronal cell survival; neurite regeneration; stroke;
KW
     epilepsy; Parkinson's disease; head injury; spinal cord injury;
ΚW
     age- related neuronal loss; amylotropic lateral sclerosis; cyclic.
ΚW
XX
OS
     Synthetic.
XX
                     Location/Qualifiers
FH
     Disulfide-bond 1. .11
FT
XX
     W09320836-A1.
PN
XX
     28-OCT-1993.
PD
XX
    14-APR-1993;
                    93WO-US003515.
PF
XX
PR
     15-APR-1992;
                    92US-00869913.
     07-OCT-1992;
                    92US-00958903.
PR
XX
PΑ
     (CEPH-) CEPHALON INC.
XX
PI
     Lewis ME, Kauer JC, Smith KR, Callison KV, Baldino F, Neff N;
PΙ
     Iqbal M;
XX
DR
     WPI; 1993-351361/44.
XX
     Peptide(s) derived from insulin-like growth factor - used for promoting
PT
     neuronal cell survival and neurite regeneration, partic. in treating
PT
PT
     diseases e.g. stroke, epilepsy, Parkinson's, etc.
XX
PS
     Claim 20; Page 86; 119pp; English.
XX
     The sequence is that of a fragment of insulin-like growth factor II (IGF-
CC
     II). The synthetic peptide can be used to enhance the survival of
CC
     neuronal cells in a mammal that are at risk of dying or to treat a head
CC
     or spinal cord injury, or to enhance neurite regeneration in a mammal, or
CC
     to treat stroke, epilepsy, age-related neuronal loss, amylotropic lateral
CC
     sclerosis and Parkinson's disease. See also AAR43590-645. (Updated on 25-
CC
     MAR-2003 to correct PN field.)
CC
XX
SQ
     Sequence 11 AA;
                          27.3%; Score 3; DB 2; Length 11;
  Query Match
  Best Local Similarity 100.0%; Pred. No. 1.3e+04;
  Matches 3; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
            1 AKS 3
Qу
             -111
Db
            7 AKS 9
RESULT 49
AAR43599
ID
     AAR43599 standard; peptide; 11 AA.
XX
AC
     AAR43599;
XX
DT
     25-MAR-2003 (revised)
```

```
10-MAY-1994 (first entry)
DT
XX
     Peptide derived from insulin-like growth factor.
DE
XX
     IGF; IGF-II; neuronal cell survival; neurite regeneration; stroke;
KW
     epilepsy; Parkinson's disease; head injury; spinal cord injury;
KW
     age- related neuronal loss; amylotropic lateral sclerosis; cyclic.
ΚW
XX
OS
     Synthetic.
XX
                     Location/Qualifiers
FH
     Disulfide-bond 1..11
FT
XX
     WO9320836-A1.
PN
XX
PD
     28-OCT-1993.
XX
                    93WO-US003515.
PF
     14-APR-1993;
XX
     15-APR-1992;
                    92US-00869913.
PR
PR
     07-OCT-1992;
                    92US-00958903.
XX
     (CEPH-) CEPHALON INC.
PA
XX
PΙ
     Lewis ME,
                Kauer JC, Smith KR, Callison KV, Baldino F, Neff N;
PΙ
     Iqbal M;
XX
DR
     WPI; 1993-351361/44.
XX
     Peptide(s) derived from insulin-like growth factor - used for promoting
PT
     neuronal cell survival and neurite regeneration, partic. in treating
PT
     diseases e.g. stroke, epilepsy, Parkinson's, etc.
PT
XX
     Claim 17; Page 79; 119pp; English.
PS
XX
     The sequence is that of a fragment of insulin-like growth factor II (IGF-
CC
     II). The synthetic peptide can be used to enhance the survival of
CC
     neuronal cells in a mammal that are at risk of dying or to treat a head
CC
     or spinal cord injury, or to enhance neurite regeneration in a mammal, or
CC
     to treat stroke, epilepsy, age-related neuronal loss, amylotropic lateral
CC
     sclerosis and Parkinson's disease. See also AAR43590-645. (Updated on 25-
CC
CC
     MAR-2003 to correct PN field.)
XX
SO-
    Sequence 11 AA;
                          27.3%; Score 3; DB 2; Length 11;
  Query Match
                          100.0%; Pred. No. 1.3e+04;
  Best Local Similarity
                                0; Mismatches
                                                                              0;
                                                    0; Indels
                                                                  0; Gaps
  Matches
            3; Conservative
            1 AKS 3
Qу
              111
            7 AKS 9
Db
RESULT 50
```

AAR43638
ID AAR43638 standard; peptide; 11 AA.

```
XX
     AAR43638;
AC
XX
     25-MAR-2003
                  (revised)
DT
     10-MAY-1994
                  (first entry)
DT
XX
     Peptide derived from insulin-like growth factor.
DΕ
XX
     IGF; IGF-II; neuronal cell survival; neurite regeneration; stroke;
KW
     epilepsy; Parkinson's disease; head injury; spinal cord injury;
KW
     age- related neuronal loss; amylotropic lateral sclerosis; cyclic.
KW
XX
OS
     Synthetic.
XX
                     Location/Qualifiers
FH
     Kev
     Disulfide-bond
                     1. .11
FT
\mathbf{FT}
     Modified-site
                     /note= "D form"
FT
XX
ΡN
     WO9320836-A1.
XX
ΡD
     28-OCT-1993.
XX
                    93WO-US003515.
PF
     14-APR-1993;
XX
                    92US-00869913.
PR
     15-APR-1992;
     07-OCT-1992;
                    92US-00958903.
PR
XX
PA
     (CEPH-) CEPHALON INC.
XX
                           Smith KR, Callison KV, Baldino F, Neff N;
                Kauer JC,
PΙ
     Lewis ME,
PΙ
     Igbal M;
XX
DR
     WPI; 1993-351361/44.
XX
PT
     Peptide(s) derived from insulin-like growth factor - used for promoting
PT
     neuronal cell survival and neurite regeneration, partic. in treating
     diseases e.g. stroke, epilepsy, Parkinson's, etc.
PT
XX
PS
     Claim 16; Page 93; 119pp; English.
XX
     The sequence is that of a fragment of insulin-like growth factor II (IGF-
CC
CC
     II). The synthetic peptide can be used to enhance the survival of
     neuronal cells in a mammal that are at risk of dying or to treat a head
CC-
     or spinal cord injury, or to enhance neurite regeneration in a mammal, or
CC
CC
     to treat stroke, epilepsy, age-related neuronal loss, amylotropic lateral
CC
     sclerosis and Parkinson's disease. See also AAR43590-645. (Updated on 25-
     MAR-2003 to correct PN field.)
CC
XX
     Sequence 11 AA;
SQ
                          27.3%; Score 3; DB 2; Length 11;
  Query Match
                          100.0%; Pred. No. 1.3e+04;
  Best Local Similarity
             3; Conservative
                               0; Mismatches
                                                    0; Indels
                                                                  0; Gaps
  Matches
```

Qy

```
RESULT 51
AAR37430
    AAR37430 standard; peptide; 11 AA.
     AAR37430;
AC
XX
     25-MAR-2003
                  (revised)
DT
DT
     08-SEP-1993
                 (first entry)
XX
     Promega peptide 5.
DE
XX
     Modified peptide substrate; non-radioactive; detection; dansyl;
ΚŴ
     sulphorhodamine 101; lissamine; rhodamine; enzymes; phosphatases;
KW
KW
     protein kinases; proteases.
XX
os
     Synthetic.
XX
                     Location/Qualifiers
FΗ
     Key
FT
     Modified-site
                     /note= "detection tag= lissamine, Rhodamine"
FT
XX
ΡN
     W09310461-A1.
XX
     27-MAY-1993.
PD
XX
PF
     12-NOV-1992;
                    92WO-US009595.
XX
PR
     12-NOV-1991;
                    91US-00791928.
XX
PΑ
     (PROM-) PROMEGA CORP.
XX
PΙ
     Shultz JW, White DH;
XX
DR
     WPI; 1993-182698/22.
XX
     Quantitating presence or activity of enzyme - by incubating with modified
PT
     peptide substrate and measuring the modified peptide prod.
PT
XX
     Claim 24; Page 27; 103pp; English.
PS
XX
     -Promega-peptide-5-is-tagged-with-dansyl-at-residue-1-and-may-be-used-in-a-
CC-
     novel non-radioactive method of quantitating the presence or activity of
CC
     an enzyme. The method can be used for rapid, specific and highly
CC
     sensitive detection of enzymes such as protein kinases, phosphatases and
CC
     proteases, esp. in this case protein kinase C. They can be used to study
CC
     enzyme function in metabolism and in diagnosis of disease. They also
CC
     allow quantitative determ. of the enzyme's activity. See also AAR37426-
CC
     36. (Updated on 25-MAR-2003 to correct PN field.)
CC
XX
SQ
     Sequence 11 AA;
                          27.3%; Score 3; DB 2; Length 11;
  Query Match
                          100.0%; Pred. No. 1.3e+04;
  Best Local Similarity
                                                                               0;
                                                       Indels
                                                                   0; Gaps
             3; Conservative
                                  0; Mismatches
                                                    0;
```

```
2 KSR 4
Qy
              111
            6 KSR 8
Db
RESULT 52
AAR44560
     AAR44560 standard; protein; 11 AA.
ID
XX
     AAR44560;
AC
XX
     25-MAR-2003 (revised)
DT
DT
     26-MAY-1994
                 (first entry)
XX
DΕ
     Encoded by human Ews exon7/Hum-Fli-1 exon 5 fusion.
XX
     chromosomal translocation; chimeric; chimaeric; Ewing sarcoma; Ews gene;
KW
     malignant melanoma; hum-fli-1;
KW
     primitive peripheral neuroectodermal tumour; human chromosome 11;
KW
     human chromosome 22.
KW
XX
OS
     Homo sapiens.
XX
                     Location/Oualifiers
FH
     Key
                     1. .5
FT
     Region
                     /note= "encoded by 3'-end of Ews exon 7"
FT
FT
     Region
                     /note= "encoded by 5'-end of Hum-Fli-1 exon 5"
FT
XX
     WO9323549-A2.
PN
XX
PD
     25-NOV-1993.
XX
     19-MAY-1993; 93WO-FR000494.
PF
XX
PR
     20-MAY-1992;
                    92FR-00006123.
XX
     (CNRS ) CNRS CENT NAT RECH SCI.
PΑ
XX
                             Desmaze C, Melot T, Peter M, Plougastel B;
PΙ
     Aurias A,
                Delattre O,
PΙ
     Thomas G,
                Zucman J;
XX
DR-
     WPI; 1993-386580/48.
DR
     N-PSDB; AAQ50673.
XX
     New nucleic acid of EWS gene and its hybrid(s) - contg. gene sequence
PT
     involved in chromosomal trans-location, also derived mRNA, probes, fusion
PT
     proteins etc., for diagnosis and treatment of Ewing sarcoma and melanoma.
PT
XX
     Disclosure; Fig 14; 123pp; French.
PS
XX
     The intron-exon junctions of the human Ews gene and the Hum-Fli-1 gene
CC
     have been sequenced (see AAQ50646 and AAQ50662, respectively). The
CC
     different fusion products which could be formed by fusing exons from the
CC
     two genes, as happens after specific chromosomal translocations, can be
CC
     predicted. See AAR44558-R44565 for the amino acid sequences resulting
CC
```

```
from the different fusion events. (Updated on 25-MAR-2003 to correct PN
CC
     field.)
XX
     Sequence 11 AA;
SQ
                          27.3%; Score 3; DB 2; Length 11;
  Query Match
                          100.0%; Pred. No. 1.3e+04;
  Best Local Similarity
                                                                               0;
                               0; Mismatches
                                                    0;
                                                        Indels
                                                                   0; Gaps
            3; Conservative
  Matches
            8 SSL 10
Qу
              \mathbf{I}
            6 SSL 8
RESULT 53
AAR53641
     AAR53641 standard; protein; 11 AA.
ΙD
XX
AC
     AAR53641;
XX
DT
     25-MAR-2003
                  (revised)
DT
     19-JAN-1995
                  (first entry)
XX
     Mutant transaminase tyrB fragment from pIF200.
DE
XX
     improved method; transaminases; conversion; D-amino acids; L-amino acids;
KW
     tyr B; tyrosine aminotransferase; amino acid synthesis.
KW
XX
OS
     Escherichia coli.
XX
     US5316943-A.
PN
XX
     31-MAY-1994.
PD
XX
                    89US-00368480.
PF
     19-JUN-1989;
XX
                    88US-00206622.
     14-JUN-1988;
PR
XX
     (SCOL/) SCOLLAR M P.
PA
     (KIDM/) KIDMAN G E.
PA
     (ROBI/) ROBINSON L E.
PA
     (ROBI/) ROBINSON L E.
PA
XX
    --Fotheringham--IG, Kidman--GE, Robinson--LE, --Scollar--MP;
PI-
XX
DR
     WPI; 1994-176276/21.
     N-PSDB; AAQ63803.
DR
ХX
     Prodn. of optically pure L-aminoacid from D,L racemic mixt. - by
PT
     fermentation with microorganism producing recombinant amino:transferase
PΤ
     to convert D to L isomer, for use in prodn. of L-phenylalanine for prepn.
PT
     of aspartame sweetener.
PT
XX
PS
     Disclosure; Fig 4; 9pp; English.
XX
     The method of the invention is particularly useful in the prepn. of
CC
     aspartame, the low calorie sweetener. It is preferred to separate the two
CC
```

CC

```
isomers or convert a racemic mixture of the two to obtain one of the
CC
     enantiomers that is relatively free of contamination by the other.
CC
     Aspartame is a dipeptide comprising aspartic acid and phenylalanine
CC
     (Phe), in the L-L form. Methods of production of Phe typically result in
CC
     racemic mixtures of D and L isomers which must either be separated or
CC
     resolved, to yield pure L-Phe. L-amino acids can be produced by
CC
     transamination. The enzymes used are expensive and often inactivated by
CC
     hydrogen peroxide (a byproduct of the reaction). This invention provides
CC
     a transaminase that produces optically pure L-Phe from a D,L racemic
CC
    mixture without the problems of previous methods. More specifically the
CC
     enzyme of interest is a mutant of the tyrosine transaminase (AAR53641 and
CC
     AAR53642, encoded by the tyrB gene - AAQ63803-4). (Updated on 25-MAR-2003
CC
     to correct PF field.)
CC
XX
SQ
     Sequence 11 AA;
                          27.3%; Score 3; DB 2; Length 11;
  Query Match
                          100.0%; Pred. No. 1.3e+04;
  Best Local Similarity
                               0; Mismatches
            3; Conservative
                                                   0; Indels
                                                                      Gaps
  Matches
            7 NSS 9
Qу
              +111
            2 NSS 4
Db
RESULT 54
AAR52885
     AAR52885 standard; peptide; 11 AA.
ID
XX
AC
     AAR52885;
XX
DT
     25-MAR-2003
                 (revised)
                 (first entry)
ĎΤ
     07-NOV-1994
XX
     TK-SH2 association inhibitory peptide.
DE
XX
     Tyrosine kinase; SH2 domains; inhibition of association; abl;
KW
     Epidermal Growth Factor Receptor; phosphotyrosine residue;
KW
     control proliferative disease; control cancer; TK; EGFR;
KW
     Src-homology domains.
KW
XX
     Synthetic.
OS
XX
                     Location/Qualifiers
FH-
FT
     Modified-site
FT
                     /label= other
                     /note= "phosphotyrosine"
FT
XX
PN
     WO9407913-A1.
XX
PD
     14-APR-1994.
XX
                    93WO-US008996.
PF
     22-SEP-1993;
XX
                    92US-00951241.
PR
     25-SEP-1992;
                    93US-00122028.
     15-SEP-1993;
PR
XX
```

```
(WARN ) WARNER LAMBERT CO.
PΑ
XX
                   Mcnamara DJ, Soltiel AR, Maclean D, Thieme-Sefler A;
     Dobrusin EM,
PΙ
XX
     WPI; 1994-135508/16.
DR
XX
     New peptide(s) with a tyrosine auto-phosphorylation site - inhibit
PT
     tyrosine kinase association with regulatory proteins, used for treating,
PT
     e.g., hyper-proliferative, viral, allergic inflammatory, auto-immune and
PT
     cardiovascular diseases.
PT
XX
PS
     Example 7; Page 11; 50pp; English.
XX
     The peptide inhibits the association of a tyrosine kinase with its
CC
     cellular substrates and effectively uncouples the tyrosine kinase from
CC
     specific signal transduction pathways. The peptide inhibition is probably
CC
     the result of competition between the phosphorylated peptide and the
CC
     phosphorylated receptor for the same binding site on the SH2 domains. The
CC
     inventors claim the peptides can be used for the control of several
CC
CC
     proliferative diseases, eg. cancer. (Updated on 25-MAR-2003 to correct PN
CC
     field.)
XX
     Sequence 11 AA;
SQ
  Query Match
                          27.3%; Score 3; DB 2; Length 11;
  Best Local Similarity
                          100.0%; Pred. No. 1.3e+04;
                                                                               0;
                                 0; Mismatches
                                                    0; Indels
                                                                      Gaps
  Matches
             3; Conservative
            7 NSS 9
Qy
              +111
            9 NSS 11
Db
RESULT 55
AAR52886
ID
     AAR52886 standard; peptide; 11 AA.
XX
     AAR52886:
AC
XX
DT
     25-MAR-2003 (revised)
                  (first entry)
DT
     07-NOV-1994
XX
     TK-SH2 association inhibitory peptide.
DE
XX
     Tyrosine kinase; SH2 domains; inhibition of association; abl;
KW
KW
     Epidermal Growth Factor Receptor; phosphotyrosine residue;
     control proliferative disease; control cancer; TK; EGFR;
KW
KW
     Src-homology domains.
XX
OS
     Synthetic.
XX
                      Location/Qualifiers
FH
     Key
     Modified-site
FT
                      /label= other
FT
                      /note= "phosphotyrosine"
FT
XX
PN
     WO9407913-A1.
```

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XX
     14-APR-1994.
PD
XX
                    93WO-US008996.
     22-SEP-1993;
PF
XX
                    92US-00951241.
     25-SEP-1992;
PR
                    93US-00122028.
     15-SEP-1993;
PR
XX
     (WARN ) WARNER LAMBERT CO.
PΑ
XX
     Dobrusin EM, Mcnamara DJ, Soltiel AR, Maclean D, Thieme-Sefler A;
PΙ
XX
     WPI; 1994-135508/16.
DR
XX
     New peptide(s) with a tyrosine auto-phosphorylation site - inhibit
PT
     tyrosine kinase association with regulatory proteins, used for treating,
PT
     e.g., hyper-proliferative, viral, allergic inflammatory, auto-immune and
PT
     cardiovascular diseases.
PT
XX
PS
     Example 8; Page 11; 50pp; English.
XX
     The peptide inhibits the association of a tyrosine kinase with its
CC
     cellular substrates and effectively uncouples the tyrosine kinase from
CC
     specific signal transduction pathways. The peptide inhibition is probably
CC
     the result of competition between the phosphorylated peptide and the
CC
     phosphorylated receptor for the same binding site on the SH2 domains. The
CC
     inventors claim the peptides can be used for the control of several
CC
     proliferative diseases, eq. cancer. (Updated on 25-MAR-2003 to correct PN
CC
     field.)
CC
XX
SQ
     Sequence 11 AA;
                          27.3%; Score 3; DB 2; Length 11;
  Query Match
                          100.0%; Pred. No. 1.3e+04;
  Best Local Similarity
                                0; Mismatches
                                                                              0;
                                                   0; Indels
                                                                  0; Gaps
             3; Conservative
  Matches
            7 NSS 9
Qy
              III
            9 NSS 11
Db
RESULT 56
AAR68593
ID
     AAR68593 standard; peptide; 11 AA.
XX
AC
     AAR68593;
XX
DT
     25-MAR-2003
                  (revised)
                  (first entry)
DT
     01-SEP-1995
XX
     Rat NDF peptide fragment #3.
DE
XX
     Alpha; beta; neu differentiation factor; NDF; human; rat; p185-neu;
KW
     tyrosine phosphorylation; differentiation; phenotype; proliferation;
KW
     wound; tumour; epithelial tissue; breast; stomach; PCR; amplify;
KW
     gastrointestinal disease; Barrett's oesophagus; primer;
KW
     (non-)cystic kidney disease; inflammatory bowel disease.
KW
```

```
XX
     Rattus rattus.
OS
XX
PN
     WO9428133-A1.
XX
     08-DEC-1994.
PD
XX
                    94WO-US005769.
     23-MAY-1994;
PF
XX
                    93US-00066384.
     21-MAY-1993;
PR
XX
     (AMGE-) AMGEN INC.
PA
XX
     Wen D, Koski RA, Pierce GF, Hu S, Sugarman BJ, Liu N;
PΙ
XX
DR
     WPI: 1995-022805/03.
XX
     New recombinant neu differentiation factors and corresp. DNA - are used
РΤ
     in the treatment of tumours, dermal wounds, and gastrointestinal, kidney
PT
     and inflammatory bowel diseases.
PT
XX
     Example 1; Page 226; 341pp; English.
PS
XX
     The sequences given in AAR68591-95 represent fragments of rat neu
CC
     differentiation factor (NDF). NDF peptides possess the ability to
CC
     stimulate p185-neu tyrosine phosphorylation. These peptides have the
CC
     ability to induce a differentiated phenotype in certain cell lines and
CC
     can stimulate or inhibit proliferation of certain cell lines. NDF's can
CC
     be used to treat wounds, tumours derived from epithelial tissue of the
CC
     breast, stomach etc., gastrointestinal disease, Barrett's oesophagus,
CC
     (non-)cystic kidney disease or inflammatory bowel disease. DNA sequences
CC
     derived from these peptides may be used as primers and probes in the
CC
     isolation sequences from human cDNA libraries which encode human NDF's.
CC
     (Updated on 25-MAR-2003 to correct PN field.)
CC
XX
SO
     Sequence 11 AA;
                          27.3%; Score 3; DB 2; Length 11;
  Query Match
                          100.0%; Pred. No. 1.3e+04;
  Best Local Similarity
                                                                              0;
                               0; Mismatches
                                                  0; Indels
             3; Conservative
  Matches
            8 SSL 10
Qу
              III
            8-SSL-10-
RESULT 57
AAR78518
     AAR78518 standard; peptide; 11 AA.
XX
AC
     AAR78518;
XX
DT
     25-JAN-1996 (first entry)
XX
     Synthetic HTLV peptide #50 binds to HLA-B35 antigen.
DE
XX
     Human T-cell leukaemia virus; HTLV; cytotoxic; HLA-B35 antigen; vaccine;
KW
```

```
prophylaxis; HTLV-1 associated myelopathy; HAM.
KW
XX
     Synthetic.
OS
XX
     JP07126290-A.
PN
XX
     16-MAY-1995.
PD
XX
                    93JP-00294472.
PF
     29-OCT-1993;
XX
     29-OCT-1993;
                    93JP-00294472.
PR
XX
PA
     (KENB/) KENBARA K.
PA
     (TAKI/) TAKIGUCHI M.
XX
    WPI; 1995-212957/28.
DR
XX
     Synthetic peptide(s) derived from human T cell leukaemia virus (HTLV) -
PT
     bind to HLA-B35 antigen, useful in a vaccine against HTLV-1 associated
PT
     myelopathy and human T cell leukaemia.
PT
XX
PS
     Claim 1; Page 2; 13pp; Japanese.
XX
CC
     Peptides AAR78469-R78518 are synthetic peptides derived from the sequence
     of the human T-cell leukaemia virus (HTLV) which are capable of inducing
CC
     cytotoxic T cells by binding to the HLA-B35 antigen. The peptides can be
CC
     used as a vaccine in prophylaxis of human T cell leukaemia and HTLV-1
CC
     associated myelopathy (HAM), both caused by HTLV. This sequence
CC
     corresponds to amino acids 97-107 of the HTLV-la and c strains pol
CC
CC
     protein
XX
SO
     Sequence 11 AA;
                          27.3%; Score 3; DB 2; Length 11;
  Query Match
  Best Local Similarity 100.0%; Pred. No. 1.3e+04;
             3; Conservative 0; Mismatches
                                                                              0;
                                                  0; Indels
                                                                      Gaps
  Matches
            8 SSL 10
Qу
              111
Db
            5 SSL 7
RESULT 58
AAW21497
ID
     AAW21497 standard; peptide; 11 AA.
XX
AC
     AAW21497;
XX
     16-OCT-2003
                  (revised)
DT
DT
     30-JUL-1997
                  (first entry)
XX
     Hepatitis delta antigen derived signal oligopeptide #2.
DE
XX
     Hydrophilic; signal oligopeptide; hydrophilicity maxima; vaccine; SIV;
KW
     competitive inhibitor; feedback regulator; synthesis; gastrin precursor;
KW
     charge; polarity; farnesyl synthetase; plasminogen activator inhibitor 1;
KW
     hydroxymethylglutaryl coenzyme A reductase; glucagon precursor; rhesus;
KW
```

```
gonadoliberin precursor; plasminogen activator inhibitor 2; prorenin;
KW
     Alzheimer amyloid A4; corticotropin releasing factor binding protein;
ΚW
     apolipoprotein E; herpes virus 1 glycoprotein B; HSV1; human; OMVVS;
KW
     herpes virus 2 glycoprotein B; HSV2; collagenase; apolipoprotein A;
KW
     Treponema pallidum membrane protein; TMPA; islet amyloid polypeptide;
KW
     fibroblast MMP1; schistosoma elastase precursor; schistosomin;
KW
     hepatitis delta antigen; rev protein; HIV; VILV; angiotensinogen.
KW
XX
OS
     Hepatitis D virus.
XX
     WO9519568-A1.
PN
XX
PD
     20-JUL-1995.
XX
                    95WO-US000575.
PF
     12-JAN-1995;
XX
     14-JAN-1994;
                    94US-00182248.
PR
XX
     (RATH/) RATH M.
PΑ
XX
PΙ
     Rath M;
XX
DR
     WPI; 1995-263953/34.
XX
     Identifying signal oligopeptide(s) in protein sequence(s) - shown as
PT
     regions of max. hydrophilicity, used in modulating communication between
PT
PT
     protein(s).
XX
     Claim 5; Page 72; 88pp; English.
PS
XX
     The sequences given in AAW21201-560 represent hydrophilic signal oligo-
CC
     peptides. These signal oligopeptides are localised on the surface of the
CC
     protein and are represented by the hydrophilicity maxima of the protein.
CC
     These peptides are enriched in charged amino acids arranged with neutral
CC
     spacer amino acids. The specific signal character of these oligopeptides
CC
     is determined by a characteristic combination of conformation and charge
CC
     within the signal sequence. These oligopeptides may be used as vaccines
CC
     in the treatment of human disease, as competitive inhibitors to prevent
CC
     or reduce the metabolic action or interaction of a selected protein by
CC
     blocking its specific signal sequences, or as therapeutic agents to
CC
     function as feedback regulators to reduce synthesis rate of a selected
CC
     protein. These peptides may be modified by omitting one or more amino
CC
     acids at the N- and/or C-terminal, by substituting one or more amino
CC
     -acids-without-consideration-of-charge-and-polarity,-by-substituting-one-
CC-
     or more amino acids with amino acid residues with similar charge and/or
CC
     polarity, by omitting one or more amino acids or a combination of these.
CC
     (Updated on 16-OCT-2003 to standardise OS field)
CC
XX
SQ
     Sequence 11 AA;
                          27.3%;
                                  Score 3; DB 2; Length 11;
  Query Match
                          100.0%; Pred. No. 1.3e+04;
  Best Local Similarity
                                0; Mismatches
                                                    0; Indels
                                                                  0; Gaps
                                                                              0;
  Matches
             3; Conservative
            3 SRK 5
Qу
              ++1
Db
            2 SRK 4
```

RESULT 59 AAW21210 AAW21210 standard; peptide; 11 AA. XX AAW21210; AC XX 29-JUL-1997 (first entry) DTXX Farnesyl synthetase derived signal oligopeptide #10. DEXX Hydrophilic; signal oligopeptide; hydrophilicity maxima; vaccine; SIV; KW competitive inhibitor; feedback regulator; synthesis; gastrin precursor; KW charge; polarity; farnesyl synthetase; plasminogen activator inhibitor 1; KW hydroxymethylglutaryl coenzyme A reductase; glucagon precursor; rhesus; KW gonadoliberin precursor; plasminogen activator inhibitor 2; prorenin; KW Alzheimer amyloid A4; corticotropin releasing factor binding protein; KW apolipoprotein E; herpes virus 1 glycoprotein B; HSV1; human; OMVVS; KW herpes virus 2 glycoprotein B; HSV2; collagenase; apolipoprotein A; KW Treponema pallidum membrane protein; TMPA; islet amyloid polypeptide; KW fibroblast MMP1; schistosoma elastase precursor; schistosomin; KW hepatitis delta antigen; rev protein; HIV; VILV; angiotensinogen. KW XX os Homo sapiens. XX PNWO9519568-A1. XX 20-JUL-1995. PD XX 95WO-US000575. PF12-JAN-1995; XX PR 14-JAN-1994; 94US-00182248. XX (RATH/) RATH M. PAXX PΙ Rath M; XX DR WPI; 1995-263953/34. XX Identifying signal oligopeptide(s) in protein sequence(s) - shown as PTregions of max. hydrophilicity, used in modulating communication between PТ PT. protein(s). XX-

Claim 5; Page 24; 88pp; English.

PS

XX

CC

CC

CC

CC

CC

CC ·

CC

CC

CC

CC

CC

The sequences given in AAW21201-560 represent hydrophilic signal oligopeptides. These signal oligopeptides are localised on the surface of the protein and are represented by the hydrophilicity maxima of the protein. These peptides are enriched in charged amino acids arranged with neutral spacer amino acids. The specific signal character of these oligopeptides is determined by a characteristic combination of conformation and charge within the signal sequence. These oligopeptides may be used as vaccines in the treatment of human disease, as competitive inhibitors to prevent or reduce the metabolic action or interaction of a selected protein by blocking its specific signal sequences, or as therapeutic agents to function as feedback regulators to reduce synthesis rate of a selected

```
protein. These peptides may be modified by omitting one or more amino
CC
     acids at the N- and/or C-terminal, by substituting one or more amino
CC
     acids without consideration of charge and polarity, by substituting one
CC
     or more amino acids with amino acid residues with similar charge and/or
CC
     polarity, by omitting one or more amino acids or a combination of these
CC
XX
     Sequence 11 AA;
SO
                          27.3%; Score 3; DB 2; Length 11;
  Query Match
                          100.0%; Pred. No. 1.3e+04;
  Best Local Similarity
                                                                  0;
                                                                               0;
                               0; Mismatches
                                                    0;
                                                        Indels
                                                                      Gaps
             3; Conservative
            8 SSL 10
Qу
              \perp
            6 SSL 8
Db
RESULT 60
AAR98482
     AAR98482 standard; peptide; 11 AA.
ID
XX
     AAR98482;
AC
XX
     12-OCT-1996 (first entry)
DT
XX
     Anti-IL-5 MAb heavy chain variable region CDR3.
DE
XX
     Antibody engineering; humanised antibody; chimeric antibody; Fab;
KW
     interleukin-5; IL-5; eosinophil; asthma; therapy; diagnosis;
KW
     complementarity determining region; CDR; heavy chain; VH;
KW
     monoclonal antibody; MAb.
KW
XX
os
     Mus sp.
XX
PN
     W09621000-A2.
XX
PD
     11-JUL-1996.
XX
PF
     22-DEC-1995;
                    95WO-US017082.
XX
PR
     23-DEC-1994;
                    94US-00363131.
                    95US-00467420.
PR
     06-JUN-1995;
     06-JUN-1995;
                    95US-00470110.
PR
XX-
     (SMIK ) SMITHKLINE BEECHAM CORP.
PA
     (SMIK ) SMITHKLINE BEECHAM PLC.
PA
XX
     Ames RS, Appelbaum ER, Chaiken IM, Cook RM,
                                                                 Holmes SD;
                                                     Gross MS,
ΡI
     Mcmillan LJ, Theisen TW;
PΙ
XX
     WPI; 1996-333976/33.
DR
XX
     New monoclonal antibody to human interleukin-5 - used to produce products
PT
     for the treatment and diagnosis of conditions associated with excess
PT
     eosinophil prodn., e.g asthma etc.
PT
XX
     Claim 11; Page 48; 120pp; English.
PS
```

```
The complementarity determining regions (CDRs) for the VH region of
CC
     monoclonal antibody (MAb) 2B6 (see also AAR98478) are given in AAR98480-
CC
     82. MAb 2F2 VH (see also AAR98478) had identical CDRs. For MAb 2E3 VH
CC
     (see also AAR98496), CDR1 and CDR2 are identical to those of 2B6 and 2F2,
CC
     but CDR3 has a different amino acid sequence (AAR98483). The CDRs for the
CC
     2B6 VL region (see also AAR98479) are given in AAR98484-86. For 2F2 VL
CC
     (see also AAR98495) and 2E3 VL (see also AAR98497), CDR1 and CDR2 are
CC
     identical to CDR1 and CDR2 of 2B6, but CDR3 is different (AAR98487). 2B6,
CC
     2F2 and 2E3 are murine anti-human interleukin-5 MAbs. The CDRs can be
CC
     used in the construction of humanised antibodies (see also AAR98488-89)
CC
     and AAR98492-93) useful in the treatment of IL-5-mediated conditions,
CC
CC
    e.g. asthma
XX
SQ
     Sequence 11 AA;
                          27.3%; Score 3; DB 2; Length 11;
  Query Match
  Best Local Similarity 100.0%; Pred. No. 1.3e+04;
                                                                      Gaps
                                                                              0;
             3; Conservative
                                0; Mismatches
                                                  0; Indels
  Matches
            8 SSL 10
Qу
              +11
            4 SSL 6
RESULT 61
AAW05770
     AAW05770 standard; peptide; 11 AA.
ID
XX
     AAW05770;
AC
XX
     25-MAR-2003
                  (revised)
DT
DT
     28-JUL-1997
                 (first entry)
XX
     Presenilin-1-1 residues 50-60.
DE
XX
KW
     Presenilin-1; human; hPS1-1; hPS1-2; PS-2; integral membrane protein; AD;
     familial Alzheimer's disease; cerebral haemorrhage; schizophrenia;
KW
     depression; antibody; gene expression modulator; therapy; mutein.
KW
XX
OS
     Homo sapiens.
XX
PN
     WO9634099-A2.
XX
PD
     31-OCT-1996.
XX
PF
     29-APR-1996;
                    96WO-CA000263.
XX
                    95US-00431048.
PR
     28-APR-1995;
                    95US-00496841.
PR
     28-JUN-1995;
                    95US-00509359:
PR
     31-JUL-1995;
XX
PΑ
     (HSCR-) HSC RES & DEV LP.
     (UTOR ) UNIV TORONTO GOVERNING COUNCIL.
PΑ
XX
PI
     St Georgehyslop PH, Fraser PE,
XX
```

XX

```
WPI; 1996-497631/49.
DR
XX
     New presenilin genes - useful for diagnosis, therapy and drug screening
PT
     of familial Alzheimer's disease, cerebral disorders, etc.
PT
XX
     Claim 71; Page; 178pp; English.
PS
XX
     AAW05768-W05788 represent antigenic fragments of the human presenilin-1-1
CC
     protein (see AAW05733 for wild type sequence). AAW05734 represents a
CC
     different wild type form of presentlin-1 that results from alternate
CC
     splicing of the genomic DNA sequence. The presentlins are a family of
CC
     highly conserved integral membrane proteins with a common structural
CC
     motif, common alternate splicing patterns, and common mutational hot spot
CC
     regions. Mutations in PS genes are implicated in familial Alzheimer's
СC
     disease (AD) and possibly other diseases such as cerebral haemorrhage,
CC
     schizophrenia, depression etc., so detection of mutations in the DNA
CC
     encoding the wild type sequences can be used for diagnosis of these
CC
     diseases. The wild type proteins, or vectors that express them or
CC
     containing antisense sequences, antibodies selective for these mutant
CC
     forms of the proteins and modulators of PS gene expression are
CC
     potentially useful for treatment of AD etc. Transgenic animals are useful
CC
     as models for drug screening. The antibodies can also be used e.g. for
CC
     affinity purification and in immunoassays. (Updated on 25-MAR-2003 to
CC
CC
     correct PI field.)
XX
     Sequence 11 AA;
SQ
                          27.3%; Score 3; DB 2; Length 11;
  Query Match
                          100.0%; Pred. No. 1.3e+04;
  Best Local Similarity
                                                                              0;
                                                       Indels
                                                                  0;
                                                                      Gaps
             3; Conservative
                                 0; Mismatches 0;
  Matches
            6 GNS 8
Qy
              III
Db
            8 GNS 10
RESULT 62
AAR89702
     AAR89702 standard; peptide; 11 AA.
ID
XX
AC
     AAR89702;
XX
     25-MAR-2003
                  (revised)
DT
     02-SEP-1996 (first entry)
DT-
XX
     Prostate specific antigen, semenogelin derived, cleavage substrate.
DE
XX
     Human; semenogelin I; sperm entrapping gel; ejaculation; protease;
KW
     gel structure; dissolution; prostate specific antigen; proteolysis;
KW
     chymotrypsin like specificity; peptide substrate; cleavage site; assay;
ΚŴ
     determination; proteolytic activity; identification; inhibitor;
KW
     cytotoxic agent; conjugated; treatment; prostate cancer.
KW
XX
OS
     Homo sapiens.
XX
                      Location/Qualifiers
FH
FT
     Modified-site
```

```
/note= "acylated"
FT
                     7. .8
     Cleavage-site
FT
                     /note= "prostate specific antigen proteolytic cleavage
FT
                     site"
FT
    Modified-site
                     11
FT
                     /note= "C-terminally conjugated to the amino of the sugar
FT
                     moiety of doxorubicin"
FT
XX
     WO9600503-A1.
PN
XX
     11-JAN-1996.
PD
XX
                    95WO-US008156.
PF
     07-JUN-1995;
XX
     28-JUN-1994;
                    94US-00267092.
PR
     15-MAR-1995;
                    95US-00404833.
PR
XX
     (MERI ) MERCK & CO INC.
PA
XX
     Defeojones D, Feng D, Garsky VM, Jones RE, Oliff AI;
PΙ
XX
     WPI; 1996-077275/08.
DR
XX
     New peptide substrates cleaved by prostate-specific antigen - also
PT
     cytotoxic conjugates for treating prostate cancer, and assay for
PT
     determination of PSA activity.
PT
XX
     Claim 19; Page 104; 142pp; English.
PS
XX
     Human semenogelin I (hSI) is one of the major proteins, including hSII
CC
     and fibronectin, in the sperm entrapping gel formed at ejaculation. This
CC
     gel structure undergoes dissolution via the action of prostate specific
CC
     antigen (PSA), a protease with chymotrypsin like specificity, which
CC
     proteolyses the above major proteins. New substrates, including the
CC
     present peptide, cleaved by PSA, i.e. peptides contg. a hSI PSA cleavage
CC
     site, can be used in assays to determine the proteolytic activity of free
CC
     PSA in a sample, and to identify cpds. which inhibit the proteolytic
CC
     activity of PSA, they may also be conjugated, via a covalent bond or
CC
     peptide linker, to a cytotoxic agent and used to treat prostate cancer.
CC
     In a PSA hydrolysis assay, the percentage of the present peptide cleaved
CC
     by YORK PSA after 3 hrs. was 100 %. (Updated on 25-MAR-2003 to correct PI
CC
CC
     field.)
XX
SO-
     Sequence 11 AA;
                          27.3%; Score 3; DB 2; Length 11;
  Query Match
                          100.0%; Pred. No. 1.3e+04;
  Best Local Similarity
                                0; Mismatches
                                                                  0; Gaps
                                                                              0;
             3; Conservative
                                                 0; Indels
            8 SSL 10
Qy
              | | |
            9 SSL 11
Db
```

RESULT 63 AAR89705

ID AAR89705 standard; peptide; 11 AA.

```
XX
     AAR89705;
AC
XX
     25-MAR-2003
                  (revised)
DT
                  (first entry)
     03-SEP-1996
DT
XX
     Prostate specific antigen, semenogelin derived, cleavage substrate.
DE
XX
     Human; semenogelin I; sperm entrapping gel; ejaculation; protease;
KW
     gel structure; dissolution; prostate specific antigen; proteolysis;
ΚW
     chymotrypsin like specificity; peptide substrate; cleavage site; assay;
KW
     determination; proteolytic activity; identification; inhibitor;
KW
     cytotoxic agent; conjugated; treatment; prostate cancer.
KW
XX
os
     Homo sapiens.
XX
FΗ
     Key
                     Location/Qualifiers
     Modified-site
FT
                     /note= "acylated"
FT
FT
     Cleavage-site
                     7. .8
                     /note= "prostate specific antigen proteolytic cleavage
FT
                     site"
FΤ
FT
     Modified-site
                     /note= "C-terminally conjugated to the amino of the sugar
FT
FT
                     moiety of doxorubicin"
XX
PN
     WO9600503-A1.
XX
PD
     11-JAN-1996.
XX
                    95WO-US008156.
PF
     07-JUN-1995;
XX
PR
     28-JUN-1994;
                    94US-00267092.
                    95US-00404833.
PR
     15-MAR-1995;
XX
     (MERI ) MERCK & CO INC.
PA
XX
     Defeojones D, Feng D, Garsky VM,
                                          Jones RE, Oliff AI;
PΙ
XX
     WPI; 1996-077275/08.
DR
XX
     New peptide substrates cleaved by prostate-specific antigen - also
PT
     cytotoxic conjugates for treating prostate cancer, and assay for
PT
     determination of PSA activity.
PT-
XX
PS
     Example 3; Page 105; 142pp; English.
XX
     Human semenogelin I (hSI) is one of the major proteins, including hSII
CC
     and fibronectin, in the sperm entrapping gel formed at ejaculation. This
CC
     gel structure undergoes dissolution via the action of prostate specific
CC
     antigen (PSA), a protease with chymotrypsin like specificity, which
СC
     proteolyses the above major proteins. New substrates, including the
CC
     present peptide, cleaved by PSA, i.e. peptides contg. a hSI PSA cleavage
CC
     site, can be used in assays to determine the proteolytic activity of free
CC
     PSA in a sample, and to identify cpds. which inhibit the proteolytic
CC
```

activity of PSA, they may also be conjugated, via a covalent bond or

peptide linker, to a cytotoxic agent and used to treat prostate cancer.

CC

CC

```
In a PSA hydrolysis assay, the percentage of the present peptide cleaved
CC
    by YORK PSA after 4 hrs. was 0 %. (Updated on 25-MAR-2003 to correct PI
CC
     field.)
CC
XX
     Sequence 11 AA;
SO
                          27.3%; Score 3; DB 2; Length 11;
 Query Match
  Best Local Similarity 100.0%; Pred. No. 1.3e+04;
                               0; Mismatches
                                                   0; Indels
                                                                 0;
                                                                     Gaps
                                                                             0;
            3; Conservative
 Matches
            8 SSL 10
Qу
              9 SSL 11
Db
RESULT 64
AAR98513
    AAR98513 standard; peptide; 11 AA.
XX
    AAR98513;
AC
XX
                 (first entry)
     04-MAR-1997
DT
XX
DΕ
     CD8 antagonist #8.
XX
     CD8 antagonist; inhibitor; T-cell activation; human; CD8 alpha chain;
KW
     thymic differentiation; transplantation; bone marrow; liver; heart; lung;
KW
     kidney; cornea; skin graft; graft versus host disease; therapy.
KW
XX
     Synthetic.
OS
XX
     WO9622106-A1.
PN
XX
     25-JUL-1996.
PD
XX
PF
     17-JAN-1996;
                    96WO-US000310.
XX
PR
     17-JAN-1995;
                    95US-00372952.
XX
     (UYJE-) UNIV JEFFERSON THOMAS.
PA
XX
     Jameson BA, Choksi S, Korngold R, Huang Z;
PΙ
XX
DR-
     WPI; 1996-354307/35.
XX
PΤ
     CD8 antagonist peptide(s) - used for inhibiting T cell activation,
     partic. for treating transplant rejection or graft versus host disease.
PT
XX
     Example 1; Page 23; 44pp; English.
PS
XX
     AAR98506-R98513 represent CD8 antagonists of the invention. CD8 plays a
CC
     major role in the activation of mature T-cells, and in the thymic
CC
     differentiation process that leads to CD8 expression. CD8 is expressed
CC
     either as a homodimer (containing two alpha chains) or as a heterodimer
CC
     (an alpha and a beta chain). The CD8 CDR2-like region is involved in
CC
     regulating T-cell activation. The antagonists of the invention comprise a
CC
     molecular surface similar to at least a portion of human CD8 molecular
CC
```

```
surface around the site of one of these peptides. The compounds of the
     invention compete with CD8 so as to inhibit T-cell activation. They can
CC
     also be used to treat an individual who is about to undergo, is
CC
     undergoing, or has undergone a transplantation procedure such as bone
CC
     marrow, liver, heart, kidney, lung, islets, or cornea transplantation, or
CC
     skin grafts. The compounds can also be used to treat an individual
CC
     suspected of suffering from, or susceptible to graft versus host disease
CC
XX
SQ
     Sequence 11 AA;
                          27.3%; Score 3; DB 2; Length 11;
  Query Match
                          100.0%; Pred. No. 1.3e+04;
  Best Local Similarity
                                                                               0;
             3: Conservative
                                0; Mismatches
                                                    0;
                                                        Indels
                                                                  0;
                                                                      Gaps
 Matches
            7 NSS 9
Qу
              111
            6 NSS 8
Db
RESULT 65
AAW06895
     AAW06895 standard; peptide; 11 AA.
XX
AC
     AAW06895;
XX
DT
     19-JUN-1997
                  (first entry)
XX
DE
     Anti-CD18 Fab epitope.
XX
     Anti-CD18; salvage receptor binding epitope; immunoglobulin G; IgG;
KW
     variant; kidney; in vivo half-life; effector; antigenic function;
KW
     LFA-1 antagonist; psoriasis; transplant rejection; asthma; wound repair;
KW
     meningitis; multiple sclerosis; B-cell lymphoma.
KW
XX
     Synthetic.
OS.
XX
     WO9632478-A1.
PN
XX
PD
     17-OCT-1996.
XX
                    96WO-US004316.
PF
     28-MAR-1996;
XX
                    95US-00422093.
PR
     14-APR-1995;
XX
     (GETH ) GENENTECH INC.
PA
XX
PI
     Presta LG,
                 Snedecor BR;
XX
     WPI; 1996-477129/47.
DR
XX
PT
     Polypeptide variants, esp. LFA-1 antagonists, comprising a salvage
     receptor binding epitope of an Fc region of an IgG - have increased in
PT
     vivo half-life and are useful to treat e.g. psoriasis, transplant
PT
PT
     rejection, asthma, etc.
XX
     Claim 13; Page 63; 72pp; English.
PS
XX
```

```
This peptide sequence is that of an anti-CD18 Fab epitope, in particular
CC
     a salvage receptor binding epitope of an immunoglobulin G (IgG) molecule.
CC
     Polypeptide variants of a protein which is cleared from the kidney (and
CC
    which does not contain a Fc region of a IgG) comprise the present
CC
     sequence and possibly also one of AAW06896-99. The variant has a longer
CC
     in vivo half-life and is useful for providing in vivo effector or
CC
     antigenic function or activity. In partic. LFA-1 antagonist variants can
CC
     be obtd. for treating LFA-1-mediated disorders (claimed), e.g. psoriasis,
CC
     transplant rejection, asthma, wound repair, meningitis, multiple
CC
     sclerosis or B-cell lymphomas
CC
XX
SO
     Sequence 11 AA;
                          27.3%; Score 3; DB 2; Length 11;
  Query Match
                          100.0%; Pred. No. 1.3e+04;
  Best Local Similarity
                                                                              0;
             3; Conservative
                                                       Indels
                                                                  0; Gaps
                                 0; Mismatches
                                                    0;
            7 NSS 9
Qу
              111
            3 NSS 5
Db
RESULT 66
AAR91286
     AAR91286 standard; peptide; 11 AA.
XX
     AAR91286;
AC
XX
DT
     14-OCT-1996 (first entry)
XX
     Anti-idiotypic T-cell modulating peptide.
DE
XX
     Peptide; VDJ; anti-idiotypic T cell; vaccine; detection; diagnosis;
KW
     insulin dependent diabetes mellitus; IDDM; assay; proliferation;
KW
KW
     cytokine.
XX
OS
     Synthetic.
XX
ΡN
     W09611214-A1.
XX
PD
     18-APR-1996.
XX
                    95WO-US012686.
PF
     10-OCT-1995;
XX
PR
     07-OCT-1994;
                    94IL-00111196.
XX
PA
     (YEDA ) YEDA RES & DEV CO LTD.
XX
PI
     Cohen IR, Elias D;
XX
     WPI; 1996-209811/21.
DR
XX
     Novel VDJ peptide and corresponding DNA - used in treatment and
PT
     prevention of insulin dependent diabetes mellitus.
PT
XX
     Claim 3; Page 41; 60pp; English.
PS
XX
```

```
Peptides having a VDJ region where V includes the dipeptide sequence A-S,
     D preferably has 2-5 amino acids and includes the dipeptide L-G and J \,
CC
     includes the tripeptide N-Q-D, may be used as agents for the detection of
CC
     anti-idiotypic T-cells and in a vaccine against insulin dependent
CC
     diabetes mellitus (IDDM). The peptides may also be used in the prevention
CC
     and treatment of IDDM by activating autologous T- cells against the
CC
     peptides and then re-administering them to the patient. The peptides may
CC
     also be used in the diagnosis or staging of IDDM or for monitoring the
CC
     course of treatment of IDDM by assaying T-cells of the subject being
CC
     tested for proliferation or cytokine production upon in vitro contact
CC
     with the peptides
CC
XX
     Sequence 11 AA;
SO
                          27.3%; Score 3; DB 2; Length 11;
  Query Match
                          100.0%; Pred. No. 1.3e+04;
  Best Local Similarity
                                                                               0;
             3: Conservative
                                0; Mismatches
                                                    0;
                                                        Indels
                                                                  0; Gaps
 Matches
            8 SSL 10
Qy
              111
Db
            2 SSL 4
RESULT 67
AAW09653
ID
     AAW09653 standard; peptide; 11 AA.
XX
AC
     AAW09653;
XX
DT
     25-MAR-2003
                  (revised)
     20-MAY-1997
                  (first entry)
DT
XX
     Labelled peptide substrate used in enzyme activity assay.
DE
XX
     Enzyme activity; assay; measurement; label; rhodamine; dansyl;
KW
     non-radioactive; electrophoretic separation; protein kinase; protease;
KW
     phosphatase.
KW
XX
OS
     Synthetic.
XX
                     Location/Qualifiers
FH
FT
     Modified-site
                     /note= "labelled with rhodamine B detection tag"
FT
XX
PN
     US5580747-A.
XX
PD
     03-DEC-1996.
XX
                    94US-00185448.
PF
     21-JAN-1994;
XX
PR
     12-NOV-1991;
                    91US-00791928.
XX
PA
     (PROM-) PROMEGA CORP.
XX
ΡI
                Shultz JW;
     White DH,
XX
DR
     WPI; 1997-033568/03.
```

```
XX
     Non:radioactive assay for measuring enzyme activity - involving
PT
     electrophoretic sepn. of labelled cleavage prod. from labelled peptide
PT
     substrate.
PT
XX
     Claim 5; Col 39-40; 35pp; English.
PS
XX
     AAW09653 is a peptide substrate used in a non-radioactive assay for
CC
     measuring enzyme activity. The assay comprises incubating the enzyme with
CC
     the labelled peptide substrate to form a labelled peptide product;
CC
     separating the product from the substrate by agarose gel electrophoresis
CC
     and measuring the amount of product by detecting the label by
CC
     fluorescence or chemiluminescence. The assay can be performed rapidly and
CC
     with great sensitivity. This peptide is especially for determining
CC
     protein kinase C activity, e.g. to study its function in metabolism or to
CC
     screen for potential inhibitors. (Updated on 25-MAR-2003 to correct PF
CC
CC
     field.)
XX
SQ
     Sequence 11 AA;
                          27.3%; Score 3; DB 2; Length 11;
  Query Match
                          100.0%; Pred. No. 1.3e+04;
  Best Local Similarity
                                 0; Mismatches
                                                    0;
                                                       Indels
                                                                  0;
                                                                      Gaps
                                                                               0;
  Matches
             3; Conservative
            2 KSR 4
Qу
              111
            6 KSR 8
Db
RESULT 68
AAE22529
     AAE22529 standard; peptide; 11 AA.
XX
AC
     AAE22529;
XX
DT
     26-JUL-2002
                 (first entry)
XX
     Human Fcgamma RI antibody (H22) hinge region fragment #3.
DE
XX
     Human; multispecific multivalent molecule; anti-Fc receptor; cytostatic;
KW
     anti-enhancement factor protein; breast; ovarian cancer; systemic lupus;
KW
     autoimmune disease; toxoplasma gondii; fungal infection; dermatological;
KW
     Fcgamma RI antibody hinge region; immunosuppressive; antimicrobial;
KW
KW
     therapy.
XX
os
     Homo sapiens.
XX
     US2002032312-A1.
PN
XX
PD
     14-MAR-2002.
XX
                    95US-00484172.
     07-JUN-1995;
PF
XX
PR
     07-JUN-1995;
                    95US-00484172.
XX
PA
     (MEDA-) MEDAREX INC.
XX
```

```
Deo YM, Goldstein J, Graziano R, Somasundaram C;
PΙ
XX
    WPI; 1997-052242/05.
DR
    N-PSDB; AAD35553.
DR
XX
     Recombinant, multi-specific anti-Fc receptor antibody molecules - also
PT
     comprise an anti-target portion, used for the treatment of cancer,
PT
     autoimmune disease and pathogenic infection.
PT
XX
     Example 2; Fig 1; 34pp; English.
PS
XX
     The invention relates to new multispecific multivalent molecules which
CC
     comprise: a recombinant multispecific molecule comprising an anti-Fc
CC
     receptor portion and an anti-target portion; a multivalent molecule
CC
     comprising at least one anti-Fc receptor portion and at least one anti-
CC
     target portion; or a multispecific molecule having one anti-FcR, one anti
CC
     -target portion and one anti-enhancement factor protein. The
CC
     multispecific, multivalent molecules are useful for treating cancer or
CC
     autoimmune disease, or for removing unwanted pathogens. These diseases
CC
     include breast or ovarian cancer, toxoplasma gondii, fungal infection or
CC
     systemic lupus. The present sequence is human Fcgamma RI antibody (H22)
CC
     hinge region fragment
CC
XX
     Sequence 11 AA;
SO
                          27.3%; Score 3; DB 2; Length 11;
  Query Match
  Best Local Similarity 100.0%; Pred. No. 1.3e+04;
             3; Conservative 0; Mismatches
                                                   0; Indels
                                                                 0;
                                                                     Gaps
                                                                              0;
  Matches
            8 SSL 10
Qу
              111
Db
            5 SSL 7
RESULT 69
AAW11502
     AAW11502 standard; peptide; 11 AA.
XX
AC
     AAW11502;
XX
     24-SEP-1997 (first entry)
DT
XX
     Humanised anti-Fc gamma RI monoclonal antibody modified H-chain hinge.
DΕ
XX
     Humanised antibody; anti-Fc receptor; H22; bifunctional; bispecific;
KW
     fusion protein; chimera; breast cancer; ovarian cancer; HER2/neu;
KW
     small cell lung carcinoma; HIV; human immunodeficiency virus;
KW
     Toxoplasma gondii; candidiasis; autoimmune disease; vaccine;
KW
     immune thrombocytopenia purpura; systemic lupus erythematosus;
KW
KW
     heavy chain.
XX
     Homo sapiens.
OS
     Mus musculus.
OS
     Synthetic.
OS
     Chimeric.
OS
XX
                     Location/Qualifiers
FΗ
     Key
```

```
5. .11
     Region
FT
                     /note= "New C-terminus; encoded by inserted sequence
FT
                     which introduces XhoI and NotI restriction sites upstream
FT
                     of a stop codon and a BamHI site downstream of the stop
FT
                     codon"
FT
XX
     WO9640789-A1.
PN
XX
PD
     19-DEC-1996.
XX
     07-JUN-1996;
                    96WO-US009988.
PF
XX
                    95US-00484172.
     07-JUN-1995;
PR
XX
     (MEDA-) MEDAREX INC.
PΑ
XX
                            Graziano R,
     Deo YM, Goldstein J,
                                         Somasundaram C;
PΙ
XX
     WPI; 1997-052242/05.
DR
     N-PSDB; AAT58126.
DR
XX
     Recombinant, multi-specific anti-Fc receptor antibody molecules - also
PT
     comprise an anti-target portion, used for the treatment of cancer,
PT
     autoimmune disease and pathogenic infection.
PT
XX
     Example 2; Fig 1C; 115pp; English.
PS
XX
     New multispecific polypeptides comprise one portion that specifically
CC
     binds to Fc-gamma receptor 1 (Fc gamma RI), one portion that binds
CC
     specifically to one epitope of a target antigen and one portion that
CC
     binds specifically to a different site on the same target cell. The
CC
     multispecific molecules can be used to treat a number of diseases and
CC
     conditions dependent upon the identity of their anti-target portion. In
CC
     particular, they can be targetted against cancers (e.g. breast cancer,
CC
     ovarian cancer expressing HER2/neu, small cell carcinoma of the lung),
CC
     pathogenic infection (e.g. viral (HIV), protozoan (Toxoplasma gondii),
CC
     fungal (candidiasis)), and autoimmune disease (e.g. immune
CC
     thrombocytopenia purpura and systemic lupus erythematosus). They are also
CC
     useful for removing unwanted pathogens and in vaccines. In specific
CC
     examples, a humanised version of a mouse anti-Fc gamma RI monoclonal
CC
     antibody, designated H22, was used as part of a multispecific fusion
CC
     construct. To produce suitable fusion genes, the heavy chain of H22 had
CC
     to be modified; the CH2 and CH3 domains were removed and replaced by
CC
     ligand-coding-sequences. PCR-was-used-to-engineer-the-sequence-coding-for-
CC-
     the new C-terminus of the heavy chain fragment having the present
CC
CC
     sequence
XX
SQ
     Sequence 11 AA;
                          27.3%; Score 3; DB 2; Length 11;
  Query Match
                          100.0%; Pred. No. 1.3e+04;
  Best Local Similarity
                                                                      Gaps
                                                                               0;
                                0; Mismatches
                                                    0; Indels
             3; Conservative
            8 SSL 10
Qу
              Db
            5 SSL 7
```

```
RESULT 70
AAW44188
     AAW44188 standard; peptide; 11 AA.
ID
XX
     AAW44188;
AC
XX
     12-MAY-1998
                  (first entry)
DT
XX
     H-2Kd-restricted cytotoxic T cell epitope HA2.
DE
XX
     H-2Kd-restricted cytotoxic T cell; CTL; epitope; nuclear protein;
KW
     influenza haemagglutinin; protection; influenza virus; immunisation.
ΚW
XX
     Synthetic.
OS
     Influenza virus.
os
XX
     WO9741891-A1.
ΡN
XX
     13-NOV-1997.
PD
XX
                    97WO-CA000296.
     02-MAY-1997;
PF
XX
     03-MAY-1996;
                    96CA-02175719.
PR
XX
     (CONN-) CONNAUGHT LAB LTD.
PΑ
XX
     Burt D, Sambhara S, Underdown B, Morein B, Klein MH;
PΙ
XX
     WPI; 1997-558696/51.
DR
XX
     Protecting against disease caused by influenza virus infection - by
PT
     immunising with solubilised influenza virus comprising haemagglutinin and
PT
     an immunostimulating complex also gives cross-protection.
PT
XX
     Example 4; Page 13; 39pp; English.
PS
XX
     A new method has been developed of protecting a host against disease
CC
     caused by infection with an influenza virus. The method comprises
CC
     administering a complex of solubilized influenza virus comprising
CC
     haemagglutinin (HA) (or fragment(s)) and an immunostimulating complex
CC
     (ISCOM) (flu-ISCOMs) to produce cytotoxic T cells specific for influenza
CC
     virus HA of H1 HA and H2 HA subtypes. A second method has been developed
CC
     which-comprises-administering-substantially-purified-HA-(or-fragment(s))
CC-
     retaining the immunological properties of HA incorporated into ISCOMs.
CC
     The present sequence represents a peptide used in an example of the
CC
     present invention. N.B. ISCOMs are known adjuvanted particulate vaccine
CC
     systems comprising cholesterol, phospholipid, antigen and Quil A (a
CC
     purified mixture of saponins from Quillaja saponaria). The methods can be
CC
     used to manufacture medicines (including vaccines) to stimulate cytotoxic
CC
     T cells specific for HA of both H1 HA and H2 HA subtypes of influenza
CC
     virus in a host, so protecting the host against disease caused by these
CC
CC
     subtypes
XX
SQ
     Sequence 11 AA;
```

```
Best Local Similarity 100.0%; Pred. No. 1.3e+04;
                                                                               0;
            3; Conservative 0; Mismatches
                                                   0; Indels
                                                                   0;
                                                                       Gaps
 Matches
            8 SSL 10
QУ
              111
            7 SSL 9
Db
RESULT 71
AAW11511
     AAW11511 standard; peptide; 11 AA.
ID
XX
     AAW11511;
AC
XX
     24-SEP-1997 (first entry)
DT
XX
     Humanised anti-Fc gamma RI monoclonal antibody modified H-chain hinge.
DE
XX
     Humanised antibody; anti-Fc receptor; H22; bifunctional; bispecific;
KW
     fusion protein; chimera; immunoglobulin E; IgE; allergen; allergy;
KW
     Fc epsilon; heavy chain.
KW
XX
OS
     Homo sapiens.
     Mus musculus.
OS
     Synthetic.
OS
     Chimeric.
OS
XX
                     Location/Qualifiers
FH
     Key
                     5. .11
FT
     Region
                      /note= "New C-terminus; encoded by inserted sequence
FT
                     which introduces XhoI and NotI restriction sites upstream
\mathbf{FT}
                     of a stop codon and a BamHI site downstream of the stop
FT
FT
                     codon"
XX
     WO9640788-A1.
PN
XX
PD
     19-DEC-1996.
XX
                     96WO-US009071.
     05-JUN-1996;
PF
XX
PR
     07-JUN-1995;
                     95US-00479902.
XX
PΑ
     (MEDA-) MEDAREX INC.
XX
PI
     Guyre PM,
               Fanger M;
XX
     WPI; 1997-052241/05.
DR
     N-PSDB; AAT58133.
DR
XX
     New bi-specific mol. with anti-effector cell and anti-IgE portions -
PT
     useful for preventing allergic reactions by reducing IgE antibody prodn.
PT
     and increasing IgG prodn.
PT
XX
     Example 1; Fig 1C; 18pp; English.
PS
XX
     New bispecific polypeptides comprise an anti-effector cell portion and an
CC
     anti-immunoglobulin E portion. In a specific example, a bispecific
CC
```

```
protein was constructed by fusing a humanised version of a mouse anti-Fc
CC
     gamma RI monoclonal antibody, designated H22, and an IgE receptor. The
CC
     resulting polypeptide was able to bind to circulating IgE or to allergen
CC
     bound to IgE. To produce a suitable fusion gene, the heavy chain of H22
CC
     had to be modified; the CH2 and CH3 domains were removed and replaced by
CC
     ligand coding sequences. PCR was used to engineer the sequence coding for
CC
     the new C-terminus of the heavy chain fragment having the present
CC
CC
     sequence
XX
     Sequence 11 AA;
SO
                          27.3%; Score 3; DB 2; Length 11;
  Query Match
                          100.0%; Pred. No. 1.3e+04;
  Best Local Similarity
                                                                              0;
             3; Conservative
                                0; Mismatches
                                                    0;
                                                       Indels
                                                                  0; Gaps
            8 SSL 10
Qу
              +
            5 SSL 7
Db
RESULT 72
AAW30194
     AAW30194 standard; peptide; 11 AA.
XX
AC
     AAW30194;
XX
DΤ
     15-APR-1998 (first entry)
XX
DΕ
     Salvage receptor binding epitope.
XX
     Salvage receptor binding epitope; antibody; ErbB3 protein; heregulin;
KW
     HRG; ErbB2-ErbB3 complex; inhibitor; tumour detection; therapy; lymphoma;
KW
     leukaemia; blastoma; carcinoma; sarcoma; inflammatory disorder;
KW
     angiogenic disease; immunological disease.
KW
XX
OS
     Mammalia.
XX
     WO9735885-A1.
PN
XX
PD
     02-OCT-1997.
XX
     07-MAR-1997;
                    97WO-US003546.
PF
XX
     -27-MAR-1996; --- 96US-00624036.
PR-
XX
     (GETH ) GENENTECH INC.
PΑ
XX
               Sliwkowski M;
PI
     Akita R,
XX
     WPI; 1997-489570/45.
DR
XX
     Antibody that binds to the ErbB3 receptor - used for diagnosis and
PT
     treatment of tumours, inflammation, angiogenesis and immunological
PT
PT
     disease.
XX
     Disclosure; Page 19; 44pp; English.
PS
XX
```

```
This sequence represents a salvage receptor binding epitope that can be
CC
     used in the antibody (AB) of the invention. The Ab of the invention is an
CC
     Ab that binds to ErbB3 protein and reduces heregulin (HRG)-induced
CC
     formation of an ErbB2-ErbB3 complex in cells producing both these
CC
     proteins. The Ab are used for in vivo and in vitro detection of ErbB3 in
CC
     binding assays, particularly for detection of tumours characterised by
CC
     elevated ErbB3 expression. The Ab are also used for treatment and
CC
     prevention of diseases associated with excessive activation of the ErbB2-
CC
     ErbB3 complex, particularly benign or malignant tumours (e.g. leukaemia,
CC
     lymphoma, blastoma, carcinoma or sarcoma), but also inflammation,
CC
     angiogenic and immunological diseases. Also, the Ab can be used as
CC
     affinity purification reagents
CC
XX
     Sequence 11 AA;
SQ
                          27.3%; Score 3; DB 2;
                                                    Length 11;
  Query Match
                          100.0%; Pred. No. 1.3e+04;
  Best Local Similarity
                                                                              0;
                               0; Mismatches
                                                    0; Indels
                                                                  0; Gaps
             3; Conservative
            7 NSS 9
Qy
              +111
            3 NSS 5
Db
RESULT 73
AAW15672
     AAW15672 standard; peptide; 11 AA.
TD
XX
     AAW15672;
AC
XX
     25-MAR-2003
                  (revised)
DT
     11-JUN-1997
                 (first entry)
DT
XX
     Platelet aggregation inhibitor #97.
DE
XX
     Platelet aggregation inhibitor; RGD analogue; cyclic peptide; fibrinogen;
KW
     hydrophobically enhanced analogue; blood platelet; endothelial surface;
KW
     blood vessel; serum protein; GP IIb/IIIa glycoprotein complex; integrin;
KW
     plasma membrane; thrombosis; cell adhesion receptor; fibronectin;
KW
     vitronectin receptor; vascular graft occlusion; therapy.
KW
XX
OS
     Synthetic.
XX
FH-
                     Location/Qualifiers-
FT
     Modified-site
                      /note= "forms peptide bond to create cyclic peptide"
FT
XX
PN
     US5612311-A.
XX
PD
     18-MAR-1997.
XX
                     94US-00363963.
PF
     22-DEC-1994;
XX
                     90US-00506444.
PR
     06-APR-1990;
                     91US-00681119.
PR
     05-APR-1991;
                     93US-00050736.
PR
     14-APR-1993;
                     94US-00204817.
PR
     02-MAR-1994;
```

```
XX
     (LJOL-) LA JOLLA CANCER RES FOUND.
PΑ
XX
                Lukeman DS, Cheng S, Tschopp JF, Pierschbacher MD;
PΙ
XX
     WPI; 1997-192139/17.
DR
XX
     RGD-contg. peptide(s) that inhibit platelet aggregation - useful for
PT
     treating thrombosis.
PT
XX
     Example 5; Col 77; 50pp; English.
PS
XX
     AAW15576-W15695 represent platelet aggregation inhibitors. All of these
CC
     sequences are hydrophobically enhanced RGD peptide analogues. The
CC
     interaction of blood platelets with the endothelial surface of injured
CC
     blood vessels and with other platelets (platelet aggregation) is a major
CC
     factor in the course of development of thrombi. Thrombosis is a serious
CC
     condition which can cause tissue damage and eventually death (if
CC
     untreated). Platelet aggregation is dependent upon the binding of
CC
     fibrinogen and other serum proteins to the GP IIb/IIIa glycoprotein
CC
     complex on the platelet plasma membrane. GP IIb/IIIa is a member of the
CC .
     integrin family of cell adhesion receptors, which are known to recognise
CC
     a RGD tripeptide recognition sequence. The peptides inhibit platelet
CC
     aggregation without prolonging bleeding time. These sequences have high
CC
     affinity for the IIb/IIIa receptor and low affinity for the fibronectin
CC
     and vitronectin receptors. The peptides are used as platelet aggregation
CC
     inhibitors for treating thrombosis and vascular graft occlusion. (Updated
CC
     on 25-MAR-2003 to correct PF field.)
CC
XX
     Sequence 11 AA;
SQ
                           27.3%; Score 3; DB 2; Length 11;
  Ouery Match
                          100.0%; Pred. No. 1.3e+04;
  Best Local Similarity
                                                                              0;
                                                        Indels
                                                                  0;
                                                                      Gaps
             3; Conservative
                                 0; Mismatches
                                                    0;
  Matches
            4 RKG 6
Qy
              111
            1 RKG 3
Db
RESULT 74
AAW25009
     AAW25009 standard; peptide; 11 AA.
ID
XX-
AC
     AAW25009;
XX
DT
     25-MAR-2003
                   (revised)
     07-OCT-1997
                  (first entry)
DT
XX
     Oncoimmunin lymphoid factor peptide used for antibody production.
DE
XX
     Oncoimmunin myeloid factor; lymphoid factor; OI-M; OI-L; antibody;
KW
     tumour; cancer diagnosis; neoplasia; monoclonal; prognosis; melanoma.
KW
XX
OS
     Homo sapiens.
XX
     US5635356-A.
 PN
```

```
XX
     03-JUN-1997.
PD
XX
     22-MAR-1994;
                    94US-00218023.
PF
XX
                    91US-00707136.
     31-MAY-1991;
PR
                    91US-00764695.
     23-SEP-1991;
PR
XX
     (USSH ) US DEPT HEALTH & HUMAN SERVICES.
PA
XX
     Komoriya A, Packard B;
PΙ
XX
     WPI; 1997-309823/28.
DR
XX
     Antibody to onco:immunin-myeloid factor - for detection of onco:immunin-
PT
PT
     myeloid factor especially in tumour cell.
XX
     Example 15; Col 43-44; 49pp; English.
PS
XX
     AAW25003-W25009 are peptides derived from an oncoimmunin-lymphoid (OI-L)
CC
     factor derived from a melanoma cell line. The peptides were used for
CC
     immunisation to produce monoclonal antibodies specific for the OI-L
CC
     factor. Antibodies specific for an oncoimmunin-myeloid (OI-M) factor were
CC
     also produced. Antibodies specific for OI-M or OI-L factors are used for
CC
     detecting the factors in a sample, to screen tumour cells for production
CC
     of the factors and hence identify cells as being of tumour origin. The
CC
     antibodies are also useful to determine serum OI-M and OI-L levels for
CC
     tumour diagnosis or for prognosis evaluation after tumour therapy.
CC
CC
     (Updated on 25-MAR-2003 to correct PF field.)
XX
     Sequence 11 AA;
SQ
                          27.3%; Score 3; DB 2; Length 11;
  Query Match
                          100.0%; Pred. No. 1.3e+04;
  Best Local Similarity
                                                                              0;
                                                    0; Indels
                                                                  0; Gaps
             3; Conservative
                              0; Mismatches
  Matches
            7 NSS 9
Qу
              111
Db
            8 NSS 10
RESULT 75
AAW28862
     AAW28862-standard; peptide; 11 AA.
XX
AC
     AAW28862;
XX
     27-AUG-2003
                  (revised)
DT
     25-MAR-2003
                  (revised)
DT
DT
     21-NOV-1997
                  (first entry)
XX
     HTLV-la,c derived peptide 50, recognised by HLA-B35.
DE
XX
     Human adult leukaemia; vaccine; prevention; therapy; epitope;
KW
     human leukocyte antigen; HLA-B35; cytotoxic T lymphocyte; diagnosis.
KW
XX
     Human T-lymphotropic virus type 1.
OS
```

```
Human adult leukaemia virus 1c.
OS
XX
     JP09188696-A.
PN
XX
     22-JUL-1997.
PD
XX
     29-OCT-1993;
                    96JP-00220326.
PF
XX
                    93JP-00294472.
     29-OCT-1993;
PR
XX
     (NOKI/) NOKIHARA K.
PΑ
     (TAKI/) TAKIGUCHI M.
PΑ
XX
     WPI; 1997-420580/39.
DR
XX
     Synthetic peptide derived from human T cell leukaemia virus - is able to
PT
     bind to HLA-B35 and is useful in a vaccine for prevention or treatment of
PΤ
     human adult leukaemia.
PT
XX
PS
     Claim 10; Page 2; 14pp; Japanese.
XX
     The present sequence corresponds to amino acids 97-107 of pol from human
CC
     adult leukaemia virus HTLV-la,c. The synthetic peptide having this
CC
     sequence is shown in cytotoxic T cells by combining with HLA-B35 antigen.
CC
     The peptide can be used in a preventive vaccine and a therapeutic agent
CC
     for human adult leukaemia caused by human T cell leukaemia virus.
CC
     (Updated on 25-MAR-2003 to correct PF field.) (Updated on 27-AUG-2003 to
CC
CC
     correct OS field.)
XX
SQ
     Sequence 11 AA;
                          27.3%; Score 3; DB 2; Length 11;
  Query Match
  Best Local Similarity 100.0%; Pred. No. 1.3e+04;
                                                                              0;
                                                                  0; Gaps
                                                   0; Indels
             3; Conservative
                               0; Mismatches
  Matches
            8 SSL 10
Qy
              \perp
            5 SSL 7
Db
Search completed: April 8, 2004, 15:40:12
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Job time: 45.3077 secs

## GenCore version 5.1.6 Copyright (c) 1993 - 2004 Compugen Ltd.

OM protein - protein search, using sw model

April 8, 2004, 15:30:08; Search time 11.3077 Seconds Run on:

(without alignments)

50.221 Million cell updates/sec

US-09-787-443A-21 Title:

Perfect score: 11

Sequence: 1 AKSRKGNSSLM 11

Scoring table: OLIGO

Gapop 60.0 , Gapext 60.0

389414 seqs, 51625971 residues Searched:

Word size :

Total number of hits satisfying chosen parameters:

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Minimum DB seq length: 11 Maximum DB seq length: 11

Post-processing: Listing first 100 summaries

Issued Patents AA:\* Database :

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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

## SUMMARIES

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3	3	27.3	11	1	US-08-030-731A-20	Sequence 20, Appl
4	3	27.3	11	1	US-07-851-941-12	Sequence 12, Appl
5	3	27.3	11	1	US-08-167-336A-11	Sequence 11, Appl
6	3	27.3	11	1	US-08-269-441A-14	Sequence 14, Appl
7	3	27.3	11	1	US-08-185-448-5	Sequence 5, Appli
8	3	27.3	11	1	US-08-190-788A-280	Sequence 280, App
9	3	27.3	11	1	US-08-167-035-38	Sequence 38, Appl
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## ALIGNMENTS

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; Patent No. 6451976
; GENERAL INFORMATION:
  APPLICANT: Trigen Limited
   TITLE OF INVENTION: BI- OR MULTIFUNCTIONAL MOLECULES BASED ON A DENDROASPIN
   TITLE OF INVENTION: SCAFFOLD
   FILE REFERENCE: P41007WO
   CURRENT APPLICATION NUMBER: US/09/381,546
   CURRENT FILING DATE: 1999-09-20
   PRIOR APPLICATION NUMBER: PCT/GB98/00848
   PRIOR FILING DATE: 1998-09-20
   PRIOR APPLICATION NUMBER: GB9705787.1
   PRIOR FILING DATE: 1997-03-20
;
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; SEQ ID NO 48
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    TYPE: PRT
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US-07-696-551B-10
; Sequence 10, Application US/07696551B
; Patent No. 5232841
  GENERAL INFORMATION:
    APPLICANT: Hashimoto, Tamotsu
    APPLICANT: Tsujimura, Atsushi
    APPLICANT: Udaka, Shigezo
    TITLE OF INVENTION: Process for Preparing Peptide
    NUMBER OF SEQUENCES: 12
     CORRESPONDENCE ADDRESS:
;
       ADDRESSEE: Finnegan, Henderson, Farabow, Garrett &
;
       ADDRESSEE: Dunner
;
       STREET: 1300 I Street, N.W., Suite 700
       CITY: Washington
       STATE: D.C.
       COUNTRY: USA
;
       ZIP: 20005-3315
;
     COMPUTER READABLE FORM:
;
       MEDIUM TYPE: Floppy disk
;
       COMPUTER: IBM PC compatible OPERATING SYSTEM: MS-DOS/PC-DOS
       SOFTWARE: Patentin Release #1.0, Version #1.25
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       APPLICATION NUMBER: US/07/696,551B
       FILING DATE: 19910509
       CLASSIFICATION: 435
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       APPLICATION NUMBER: JP 2-122166
       FILING DATE: 11-MAY-1990
;
     PRIOR APPLICATION DATA:
       APPLICATION NUMBER: JP 2-334575
       FILING DATE: 30-NOV-1990
     ATTORNEY/AGENT INFORMATION:
;
       NAME: Lawrence M. Lavin, Jr.
       REGISTRATION NUMBER: 30,768
       REFERENCE/DOCKET NUMBER: 2481-1070
;
     TELECOMMUNICATION INFORMATION:
       TELEPHONE: (202) 408-4000
       TELEFAX: (202) 408-4400
   INFORMATION FOR SEQ ID NO:
     SEQUENCE CHARACTERISTICS:
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LENGTH: 11 amino acids
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      TOPOLOGY: linear
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; Sequence 20, Application US/08030731A
; Patent No. 5426036
  GENERAL INFORMATION:
    APPLICANT: Koller, Klaus-Peter
    APPLICANT: Riess, Guenther Johannes
    APPLICANT: Uhlmann, Eugen
    APPLICANT: Wallmeier, Holger
    TITLE OF INVENTION: Processes for the Preparation of Foreign
;
    TITLE OF INVENTION: Proteins in Streptomycetes
;
    NUMBER OF SEQUENCES: 48
;
    CORRESPONDENCE ADDRESS:
      ADDRESSEE: Finnegan, Henderson, Farabow, Garrett &
      ADDRESSEE: Dunner
      STREET: 1300 I Street, N.W., Suite 700
      CITY: Washington
      STATE: D.C.
      COUNTRY: USA
;
      ZIP: 20005-3315
;
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       FILING DATE: 12-MAR-1993
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       FILING DATE: 03-MAY-1988
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       APPLICATION NUMBER: US 07/430,622
       FILING DATE: 01-NOV-1989
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       FILING DATE: 19-APR-1991
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      FILING DATE: 29-JUL-1991
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      FILING DATE: 03-NOV-1988
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      FILING DATE: 19-AUG-1989
    PRIOR APPLICATION DATA:
      APPLICATION NUMBER: DE P 40 12 818.0
      FILING DATE: 21-APR-1990
    ATTORNEY/AGENT INFORMATION:
      NAME: Kirschner Michael K.
;
      REGISTRATION NUMBER: 34,851
;
      REFERENCE/DOCKET NUMBER: 02481-0593-02000
    TELECOMMUNICATION INFORMATION:
;
      TELEPHONE: 202-408-4000
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; Patent No. 5428016
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     APPLICANT: Mamoru TOMITA et al.
     TITLE OF INVENTION: Antimicrobial Peptide and an
     TITLE OF INVENTION: Antimicrobial Agent
;
     NUMBER OF SEQUENCES: 18
;
     CORRESPONDENCE ADDRESS:
       ADDRESSEE: Wenderoth, Lind & Ponack
       STREET: 805 Fifteenth Street, N.W., #700
       CITY: Washington
       STATE: D.C.
       COUNTRY: U.S.A.
;
       ZIP: 20005
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       OPERATING SYSTEM: MS-DOS
       SOFTWARE: DisplayWrite
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      FILING DATE: March 13, 1992
    ATTORNEY/AGENT INFORMATION:
      NAME: Warren M. Cheek, Jr.
      REGISTRATION NUMBER: 33,367
      REFERENCE/DOCKET NUMBER:
    TELECOMMUNICATION INFORMATION:
      TELEPHONE: 202-371-8850
      TELEFAX:
      TELEX:
;
  INFORMATION FOR SEQ ID NO: 12:
;
    SEQUENCE CHARACTERISTICS:
;
      LENGTH: 11 amino acid residues
      TYPE: AMINO ACID
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      TOPOLOGY: linear
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       JOURNAL:
       VOLUME:
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; Sequence 11, Application US/08167336A
; Patent No. 5531990
  GENERAL INFORMATION:
    APPLICANT: THANAVALA, YASMIN
    APPLICANT: THAKUR, ARVIND
    APPLICANT: ROITT, IVAN
    APPLICANT: PRIDE, MICHAEL
    TITLE OF INVENTION: ANTI-IDIOTYPIC ANTIBODY
    TITLE OF INVENTION: HAVING CORRESPONDENCE WITH HUMAN HEPATITIS
    TITLE OF INVENTION: B SURFACE ANTIGEN
    NUMBER OF SEQUENCES: 12
    CORRESPONDENCE ADDRESS:
      ADDRESSEE: DUNN & ASSOCIATES, P.C.
      STREET: P.O. BOX 96
      CITY: NEWFANE
      STATE: NEW YORK
       COUNTRY: USA
;
      ZIP: 14108
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       COMPUTER: VICTOR 300 SX/25
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      OPERATING SYSTEM: MS-DOS VERSION 5.0
       SOFTWARE: WORDSTAR PROFESSIONAL RELEASE 4
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       FILING DATE: 15-DEC-1993
       CLASSIFICATION: 530
     PRIOR APPLICATION DATA:
       APPLICATION NUMBER:
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       FILING DATE:
     ATTORNEY/AGENT INFORMATION:
       NAME: DUNN, MICHAEL L.
       REGISTRATION NUMBER: 25,330
       REFERENCE/DOCKET NUMBER: RPP:138 US
     TELECOMMUNICATION INFORMATION:
       TELEPHONE: (716) 433-1661
       TELEFAX: (716) 433-1665
   INFORMATION FOR SEQ ID NO: 11:
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       STRANDEDNESS: UNKNOWN
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      ORGANISM:
      STRAIN:
      INDIVIDUAL ISOLATE:
      DEVELOPMENTAL STAGE:
      HAPLOTYPE:
      TISSUE TYPE:
      CELL TYPE:
     CELL LINE:
      ORGANELLE:
    IMMEDIATE SOURCE:
      LIBRARY:
      CLONE:
    POSITION IN GENOME:
      CHROMOSOME/SEGMENT:
      MAP POSITION:
      UNITS:
    FEATURE:
      NAME/KEY:
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      LOCATION:
;
       IDENTIFICATION METHOD:
;
       OTHER INFORMATION:
;
    PUBLICATION INFORMATION:
     AUTHORS:
;
      TITLE:
      JOURNAL:
;
      VOLUME:
      ISSUE:
;
;
       PAGES:
       DATE:
       DOCUMENT NUMBER:
       FILING DATE:
       PUBLICATION DATE:
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US-08-167-336A-11
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Qу
             7 GNS 9
RESULT 6
US-08-269-441A-14
; Sequence 14, Application US/08269441A
; Patent No. 5552529
; GENERAL INFORMATION:
     APPLICANT: Rearden, Ann
     TITLE OF INVENTION: A NOVEL AUTOANTIGEN, PINCH
```

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NUMBER OF SEQUENCES: 17
    CORRESPONDENCE ADDRESS:
      ADDRESSEE: Fish & Richardson P.C.
      STREET: 4225 Executive Square, Suite 1400
      CITY: Los Angeles
      STATE: California
      COUNTRY: USA
      ZIP: 92037
    COMPUTER READABLE FORM:
      MEDIUM TYPE: Floppy disk
      COMPUTER: IBM PC compatible
      OPERATING SYSTEM: PC-DOS/MS-DOS
      SOFTWARE: PatentIn Release #1.0, Version #1.25
    CURRENT APPLICATION DATA:
      APPLICATION NUMBER: US/08/269,441A
      FILING DATE: 30-JUN-1994
      CLASSIFICATION: 435
    ATTORNEY/AGENT INFORMATION:
      NAME: Haile Ph.D., Lisa A.
      REGISTRATION NUMBER: 38,347
      REFERENCE/DOCKET NUMBER: 07257/009001
    TELECOMMUNICATION INFORMATION:
     TELEPHONE: (619) 678-5070
       TELEFAX: (619) 678-5099
  INFORMATION FOR SEQ ID NO: 14:
     SEQUENCE CHARACTERISTICS:
;
       LENGTH: 11 amino acids
;
       TYPE: amino acid
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       STRANDEDNESS: single
       TOPOLOGY: linear
    MOLECULE TYPE: peptide
     FEATURE:
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US-08-269-441A-14
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            7 NSS 9
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            3 NSS 5
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RESULT 7
US-08-185-448-5
; Sequence 5, Application US/08185448
; Patent No. 5580747
  GENERAL INFORMATION:
     APPLICANT: SHULTZ, JOHN W.
     APPLICANT: WHITE, DOUGLAS H.
;
     TITLE OF INVENTION: NON-RADIOACTIVE KINASE,
TITLE OF INVENTION: PHOSPHATASE AND PROTEASE ASSAY
     NUMBER OF SEQUENCES: 11
     CORRESPONDENCE ADDRESS:
       ADDRESSEE: ANDRUS, SCEALES, STARKE & SAWALL
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STREET: 100 E. WISCONSIN AVENUE, SUITE 1100
      CITY: MILWAUKEE
      STATE: WISCONSIN
      COUNTRY: USA
      ZIP: 53202
    COMPUTER READABLE FORM:
      MEDIUM TYPE: Floppy disk
      COMPUTER: IBM PC compatible
      OPERATING SYSTEM: PC-DOS/MS-DOS
      SOFTWARE: PatentIn Release #1.0, Version
      SOFTWARE: #1.25
    CURRENT APPLICATION DATA:
      APPLICATION NUMBER: US/08/185,448
      FILING DATE: 21-JAN-1994
      CLASSIFICATION: 435
    PRIOR APPLICATION DATA:
      APPLICATION NUMBER: US 07/791,928
      FILING DATE: 12-NOV-1991
;
    ATTORNEY/AGENT INFORMATION:
      NAME: SARA, CHARLES S
      REGISTRATION NUMBER: 30492
      REFERENCE/DOCKET NUMBER: F.3347-1
    TELECOMMUNICATION INFORMATION:
      TELEPHONE: (608) 255-2022
      TELEFAX: (608) 255-2182
;
      TELEX: 26832 ANDSTARK
;
  INFORMATION FOR SEQ ID NO:
;
    SEQUENCE CHARACTERISTICS:
      LENGTH: 11 amino acids
      TYPE: amino acid
      TOPOLOGY: linear
    MOLECULE TYPE: peptide
    FEATURE:
;
      NAME/KEY: Binding-site
      LOCATION:
      OTHER INFORMATION: /label= LABEL
      OTHER INFORMATION: /note= "LOCATION OF LISSAMINE RHODAMINE
      OTHER INFORMATION: DETECTION TAG"
US-08-185-448-5
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           3; Conservative 0; Mismatches 0; Indels
                                                                0; Gaps
 Matches
           2 KSR 4
Qу
             111
           6 KSR 8
Db
RESULT 8
US-08-190-788A-280
; Sequence 280, Application US/08190788A
; Patent No. 5608035
; GENERAL INFORMATION:
    APPLICANT: Yanofsky, Stephen D.
    APPLICANT: Barrett, Ronald W.
    APPLICANT: Baldwin, David N.
```

```
APPLICANT: Jacobs, Jeff W.
;
    TITLE OF INVENTION: Peptides and Compounds That Bind to the
    TITLE OF INVENTION: IL-1 Receptor
;
    NUMBER OF SEQUENCES: 312
    CORRESPONDENCE ADDRESS:
      ADDRESSEE: Affymax Technologies N.V.
      STREET: 4001 Miranda Avenue
      CITY: Palo Alto
      STATE: California
      COUNTRY: USA
;
      ZIP: 94304
    COMPUTER READABLE FORM:
      MEDIUM TYPE: Floppy disk
      COMPUTER: IBM PC compatible
      OPERATING SYSTEM: PC-DOS/MS-DOS
      SOFTWARE: PatentIn Release #1.0, Version #1.25
    CURRENT APPLICATION DATA:
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      APPLICATION NUMBER: US/08/190,788A
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      FILING DATE: 02-FEB-1994
      CLASSIFICATION: 530
     PRIOR APPLICATION DATA:
      APPLICATION NUMBER: US 07/847,567
      FILING DATE: 05-MAR-1992
;
    ATTORNEY/AGENT INFORMATION:
      NAME: Stevens, Lauren L.
      REGISTRATION NUMBER: 36,691
      REFERENCE/DOCKET NUMBER: 1019.1
;
     TELECOMMUNICATION INFORMATION:
;
      TELEPHONE: 415-496-2300
      TELEFAX: 415-424-0832
   INFORMATION FOR SEQ ID NO: 280:
    SEQUENCE CHARACTERISTICS:
      LENGTH: 11 amino acids
      TYPE: amino acid
       STRANDEDNESS: single
       TOPOLOGY: linear
     MOLECULE TYPE: peptide
US-08-190-788A-280
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  Query Match
  Best Local Similarity 100.0%; Pred. No. 2.7e+03;
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            3; Conservative 0; Mismatches 0; Indels 0; Gaps
  Matches
            7 NSS 9
Qу
              \perp
            2 NSS 4
Db
RESULT 9
US-08-167-035-38
; Sequence 38, Application US/08167035
; Patent No. 5618691
; GENERAL INFORMATION:
     APPLICANT: Schlessinger, Joseph
     APPLICANT: Skolnick, Edward Y.
     APPLICANT: Margolis, Benjamin L.
     TITLE OF INVENTION: NOVEL EXPRESSION CLONING METHOD FOR
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TITLE OF INVENTION: IDENTIFYING TARGET PROTEINS FOR EUKARYOTIC TYROSINE
    TITLE OF INVENTION: KINASES AND NOVEL TARGET PROTEINS
    NUMBER OF SEQUENCES: 50
    CORRESPONDENCE ADDRESS:
      ADDRESSEE: PENNIE & EDMONDS
      STREET: 1155 Avenue of the Americas
      CITY: New York
      STATE: New York
      COUNTRY: 10036-2711
      ZIP: 10036-2711
    COMPUTER READABLE FORM:
      MEDIUM TYPE: Floppy disk
      COMPUTER: IBM PC compatible
      OPERATING SYSTEM: PC-DOS/MS-DOS
      SOFTWARE: PatentIn Release #1.0, Version #1.30
    CURRENT APPLICATION DATA:
      APPLICATION NUMBER: US/08/167,035
      FILING DATE: 16-DEC-1993
      CLASSIFICATION: 435
    ATTORNEY/AGENT INFORMATION:
      NAME: Coruzzi, Laura A.
      REGISTRATION NUMBER: 30,742
      REFERENCE/DOCKET NUMBER: 7683-062
    TELECOMMUNICATION INFORMATION:
      TELEPHONE: (212) 790-9090
      TELEFAX: (212) 869-9741/8864
;
      TELEX: 66141 PENNIE
;
  INFORMATION FOR SEQ ID NO: 38:
    SEQUENCE CHARACTERISTICS:
      LENGTH: 11 amino acids
      TYPE: amino acid
      TOPOLOGY: unknown
    MOLECULE TYPE: peptide
US-08-167-035-38
                         27.3%; Score 3; DB 1; Length 11;
 Query Match
                         100.0%; Pred. No. 2.7e+03;
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           3; Conservative 0; Mismatches 0; Indels 0; Gaps
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           7 NSS 9
             3 NSS 5
RESULT 10
US-08-179-481-44
; Sequence 44, Application US/08179481
; Patent No. 5624816
   GENERAL INFORMATION:
    APPLICANT: CARRAWAY, KERMIT L.
    APPLICANT: CAROTHERS CARRAWAY, CORALIE A.
    APPLICANT: FREGIEN, NEVIS L.
;
    TITLE OF INVENTION: ONCOGENE PRODUCT LIGAND
;
    NUMBER OF SEQUENCES: 125
    CORRESPONDENCE ADDRESS:
      ADDRESSEE: CUSHMAN, DARBY & CUSHMAN
       STREET: 1100 NEW YORK AVENUE, N.W.
```

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CITY: WASHINGTON
      STATE: D.C.
      COUNTRY: U.S.A.
      ZIP: 20005-3918
    COMPUTER READABLE FORM:
      MEDIUM TYPE: Floppy disk
      COMPUTER: IBM PC compatible
      OPERATING SYSTEM: PC-DOS/MS-DOS
      SOFTWARE: PatentIn Release #1.0, Version #1.25
    CURRENT APPLICATION DATA:
      APPLICATION NUMBER: US/08/179,481
;
      FILING DATE: 28-DEC-1993
      CLASSIFICATION: 435
    PRIOR APPLICATION DATA:
      APPLICATION NUMBER: US 07/922,521
      FILING DATE: 30-JUL-1992
    ATTORNEY/AGENT INFORMATION:
      NAME: KOKULIS, PAUL N.
      REGISTRATION NUMBER: 16,773
      REFERENCE/DOCKET NUMBER: 200702/UM92-08CIP
    TELECOMMUNICATION INFORMATION:
      TELEPHONE: (202) 861-3000
      TELEFAX: (202) 822-0944
      TELEX: 6714627 CUSH
  INFORMATION FOR SEQ ID NO: 44:
    SEQUENCE CHARACTERISTICS:
     LENGTH: 11 amino acids
      TYPE: amino acid
      STRANDEDNESS: single
      TOPOLOGY: linear
    MOLECULE TYPE: peptide
US-08-179-481-44
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Db
RESULT 11
US-08-218-023-9
; Sequence 9, Application US/08218023
; Patent No. 5635356
  GENERAL INFORMATION:
    APPLICANT: Packard, Beverly
    APPLICANT: Komoriya, Akira
    TITLE OF INVENTION: ONCOIMMUNINS
    NUMBER OF SEQUENCES: 9
    CORRESPONDENCE ADDRESS:
      ADDRESSEE: Townsend and Townsend Khourie and Crew
      STREET: Steuart Street Tower, One Market Plaza
      CITY: San Francisco
      STATE: California
      COUNTRY: US
```

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ZIP: 94105-1493
    COMPUTER READABLE FORM:
      MEDIUM TYPE: Floppy disk
      COMPUTER: IBM PC compatible
      OPERATING SYSTEM: PC-DOS/MS-DOS
      SOFTWARE: PatentIn Release #1.0, Version #1.25
    CURRENT APPLICATION DATA:
      APPLICATION NUMBER: US/08/218,023
      FILING DATE:
      CLASSIFICATION: 424
    ATTORNEY/AGENT INFORMATION:
      NAME: Dow, Karen B.
      REGISTRATION NUMBER: 29,684
      REFERENCE/DOCKET NUMBER: 15280-132-1, E12691/2
    TELECOMMUNICATION INFORMATION:
      TELEPHONE: (415) 543-9600
      TELEFAX: (415) 543-5043
  INFORMATION FOR SEQ ID NO: 9:
    SEQUENCE CHARACTERISTICS:
      LENGTH: 11 amino acids
      TYPE: amino acid
      TOPOLOGY: unknown
    MOLECULE TYPE: peptide
US-08-218-023-9
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 Best Local Similarity 100.0%; Pred. No. 2.7e+03;
           3; Conservative 0; Mismatches 0; Indels
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 Matches
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Qy
             \parallel 1 \parallel 1
           8 NSS 10
Db
RESULT 12
US-08-372-952-8
; Sequence 8, Application US/08372952
; Patent No. 5645837
; GENERAL INFORMATION:
    APPLICANT: Jameson, Bradford A.
    APPLICANT: Choksi, Swati
    APPLICANT: Korngold, Robert
    TITLE OF INVENTION: CD8 Antagonists
    NUMBER OF SEQUENCES: 8
    CORRESPONDENCE ADDRESS:
      ADDRESSEE: Woodcock Washburn Kurtz Mackiewicz &
      ADDRESSEE: No. 5645837ris
      STREET: One Liberty Place, 46th Floor
       CITY: Philadelphia
       STATE: PA
       COUNTRY: USA
       ZIP: 19103
    COMPUTER READABLE FORM:
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      MEDIUM TYPE: Floppy disk
       COMPUTER: IBM PC compatible
       OPERATING SYSTEM: PC-DOS/MS-DOS
       SOFTWARE: Wordperfect
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CURRENT APPLICATION DATA:
      APPLICATION NUMBER: US/08/372,952
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      FILING DATE:
      CLASSIFICATION: 514
    PRIOR APPLICATION DATA:
      APPLICATION NUMBER:
      FILING DATE:
      CLASSIFICATION: 514
    ATTORNEY/AGENT INFORMATION:
      NAME: DeLuca, Mark
      REGISTRATION NUMBER: 33,229
      REFERENCE/DOCKET NUMBER: TJU-1440
    TELECOMMUNICATION INFORMATION:
      TELEPHONE: 215-568-3100
      TELEFAX: 215-568-3439
;
  INFORMATION FOR SEQ ID NO: 8:
    SEQUENCE CHARACTERISTICS:
;
      LENGTH: 11 amino acids
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      TOPOLOGY: linear
    MOLECULE TYPE: protein
US-08-372-952-8
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Qу
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RESULT 13
US-07-958-903A-5
; Sequence 5, Application US/07958903A
; Patent No. 5652214
   GENERAL INFORMATION:
    APPLICANT: Lewis, Michael E.
    APPLICANT: Kauer, James C.
    APPLICANT: Smith, Kevin R.
     APPLICANT: Callison, Kathleen V.
     APPLICANT: Baldino, Frank
     APPLICANT: Neff, Nicola
     APPLICANT: Iqbal, Mohamed
     TITLE OF INVENTION: TREATING DISORDERS BY APPLICATION
     TITLE OF INVENTION: OF INSULIN-LIKE GROWTH FACTORS AND
     TITLE OF INVENTION: ANALOGS
     NUMBER OF SEQUENCES: 56
     CORRESPONDENCE ADDRESS:
       ADDRESSEE: Fish & Richardson
       STREET: 225 Franklin Street
       CITY: Boston
       STATE: Massachusetts
       COUNTRY: U.S.A.
       ZIP: 02110-2804
     COMPUTER READABLE FORM:
       MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
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COMPUTER: IBM PS/2 Model 50Z or 55SX
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       OPERATING SYSTEM: MS-DOS (Version 5.0)
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       SOFTWARE: WordPerfect (Version 5.1)
    CURRENT APPLICATION DATA:
       APPLICATION NUMBER: US/07/958,903A
       FILING DATE: October 7, 1992
       CLASSIFICATION: 514
     PRIOR APPLICATION DATA:
;
       APPLICATION NUMBER: 07/361,595
;
       FILING DATE: June 5, 1989
       APPLICATION NUMBER: 07/534,139
       FILING DATE: June 5, 1990
       APPLICATION NUMBER: 07/869,913
       FILING DATE: April 15, 1992
    ATTORNEY/AGENT INFORMATION:
       NAME: Clark, Paul T.
;
       REGISTRATION NUMBER: 30,162
;
       REFERENCE/DOCKET NUMBER: 02655/003004
     TELECOMMUNICATION INFORMATION:
       TELEPHONE: (617) 542-5070
       TELEFAX: (617) 542-8906
       TELEX: 200154
   INFORMATION FOR SEQ ID NO: 5:
     SEQUENCE CHARACTERISTICS:
       LENGTH: 11
       TYPE: amino acid
       STRANDEDNESS:
       TOPOLOGY: linear
US-07-958-903A-5
                          27.3%; Score 3; DB 1; Length 11;
  Query Match
  Best Local Similarity 100.0%; Pred. No. 2.7e+03;
  Matches 3; Conservative 0; Mismatches 0; Indels
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            1 AKS 3
Qу
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Db
RESULT 14
US-07-958-903A-9
; Sequence 9, Application US/07958903A
; Patent No. 5652214
   GENERAL INFORMATION:
     APPLICANT: Lewis, Michael E.
     APPLICANT: Kauer, James C.
     APPLICANT: Smith, Kevin R.
     APPLICANT: Callison, Kathleen V.
     APPLICANT: Baldino, Frank
     APPLICANT: Neff, Nicola
     APPLICANT: Iqbal, Mohamed
     TITLE OF INVENTION: TREATING DISORDERS BY APPLICATION TITLE OF INVENTION: OF INSULIN-LIKE GROWTH FACTORS AND
;
     TITLE OF INVENTION: ANALOGS
     NUMBER OF SEQUENCES: 56
     CORRESPONDENCE ADDRESS:
       ADDRESSEE: Fish & Richardson
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STREET: 225 Franklin Street
      CITY: Boston
;
      STATE: Massachusetts
      COUNTRY: U.S.A.
      ZIP: 02110-2804
    COMPUTER READABLE FORM:
      MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
      COMPUTER: IBM PS/2 Model 50Z or 55SX
      OPERATING SYSTEM: MS-DOS (Version 5.0)
      SOFTWARE: WordPerfect (Version 5.1)
    CURRENT APPLICATION DATA:
      APPLICATION NUMBER: US/07/958,903A
      FILING DATE: October 7, 1992
      CLASSIFICATION: 514
    PRIOR APPLICATION DATA:
      APPLICATION NUMBER: 07/361,595
      FILING DATE: June 5, 1989
      APPLICATION NUMBER: 07/534,139
      FILING DATE: June 5, 1990
      APPLICATION NUMBER: 07/869,913
      FILING DATE: April 15, 1992
    ATTORNEY/AGENT INFORMATION:
      NAME: Clark, Paul T.
      REGISTRATION NUMBER: 30,162
      REFERENCE/DOCKET NUMBER: 02655/003004
    TELECOMMUNICATION INFORMATION:
      TELEPHONE: (617) 542-5070
      TELEFAX: (617) 542-8906
      TELEX: 200154
   INFORMATION FOR SEQ ID NO: 9:
    SEQUENCE CHARACTERISTICS:
      LENGTH: 11
      TYPE: amino acid
      STRANDEDNESS:
      TOPOLOGY: linear
US-07-958-903A-9
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  Query Match
                         100.0%; Pred. No. 2.7e+03;
  Best Local Similarity
           3; Conservative 0; Mismatches 0; Indels
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 Matches
           1 AKS 3
Qу
             111
           7 AKS 9
Db
RESULT 15
US-07-958-903A-10
; Sequence 10, Application US/07958903A
; Patent No. 5652214
  GENERAL INFORMATION:
    APPLICANT: Lewis, Michael E.
    APPLICANT: Kauer, James C.
    APPLICANT: Smith, Kevin R.
    APPLICANT: Callison, Kathleen V.
    APPLICANT:
                Baldino, Frank
    APPLICANT: Neff, Nicola
```

```
APPLICANT: Iqbal, Mohamed
    TITLE OF INVENTION: TREATING DISORDERS BY APPLICATION
    TITLE OF INVENTION: OF INSULIN-LIKE GROWTH FACTORS AND
;
    TITLE OF INVENTION: ANALOGS
    NUMBER OF SEQUENCES: 56
    CORRESPONDENCE ADDRESS:
      ADDRESSEE: Fish & Richardson
      STREET: 225 Franklin Street
      CITY: Boston
      STATE: Massachusetts
      COUNTRY: U.S.A.
      ZIP: 02110-2804
    COMPUTER READABLE FORM:
      MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
      COMPUTER: IBM PS/2 Model 50Z or 55SX
      OPERATING SYSTEM: MS-DOS (Version 5.0)
      SOFTWARE: WordPerfect (Version 5.1)
    CURRENT APPLICATION DATA:
;
      APPLICATION NUMBER: US/07/958,903A
ï
      FILING DATE: October 7, 1992
      CLASSIFICATION: 514
    PRIOR APPLICATION DATA:
      APPLICATION NUMBER: 07/361,595
      FILING DATE: June 5, 1989
      APPLICATION NUMBER: 07/534,139
      FILING DATE: June 5, 1990
      APPLICATION NUMBER: 07/869,913
      FILING DATE: April 15, 1992
    ATTORNEY/AGENT INFORMATION:
      NAME: Clark, Paul T.
      REGISTRATION NUMBER: 30,162
      REFERENCE/DOCKET NUMBER: 02655/003004
    TELECOMMUNICATION INFORMATION:
      TELEPHONE: (617) 542-5070
      TELEFAX: (617) 542-8906
      TELEX: 200154
   INFORMATION FOR SEQ ID NO: 10:
     SEQUENCE CHARACTERISTICS:
      LENGTH: 11
       TYPE: amino acid
       STRANDEDNESS:
       TOPOLOGY: linear
US-07-958-903A-10
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  Query Match
  Best Local Similarity 100.0%; Pred. No. 2.7e+03;
           3; Conservative 0; Mismatches
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Qу
             \mathbf{I}
           7 AKS 9
Db
RESULT 16
US-07-958-903A-29
; Sequence 29, Application US/07958903A
; Patent No. 5652214
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```
GENERAL INFORMATION:
    APPLICANT: Lewis, Michael E.
    APPLICANT: Kauer, James C.
    APPLICANT: Smith, Kevin R.
    APPLICANT: Callison, Kathleen V.
    APPLICANT: Baldino, Frank
                Neff, Nicola
    APPLICANT:
    APPLICANT: Igbal, Mohamed
    TITLE OF INVENTION: TREATING DISORDERS BY APPLICATION
    TITLE OF INVENTION: OF INSULIN-LIKE GROWTH FACTORS AND
    TITLE OF INVENTION: ANALOGS
    NUMBER OF SEQUENCES: 56
    CORRESPONDENCE ADDRESS:
      ADDRESSEE: Fish & Richardson
      STREET: 225 Franklin Street
      CITY: Boston
      STATE: Massachusetts
      COUNTRY: U.S.A.
      ZIP: 02110-2804
;
    COMPUTER READABLE FORM:
      MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
      COMPUTER: IBM PS/2 Model 50Z or 55SX
      OPERATING SYSTEM: MS-DOS (Version 5.0)
      SOFTWARE: WordPerfect (Version 5.1)
    CURRENT APPLICATION DATA:
      APPLICATION NUMBER: US/07/958,903A
;
      FILING DATE: October 7, 1992
;
      CLASSIFICATION: 514
    PRIOR APPLICATION DATA:
      APPLICATION NUMBER: 07/361,595
      FILING DATE: June 5, 1989
      APPLICATION NUMBER: 07/534,139
      FILING DATE: June 5, 1990
      APPLICATION NUMBER: 07/869,913
      FILING DATE: April 15, 1992
;
    ATTORNEY/AGENT INFORMATION:
;
      NAME: Clark, Paul T.
;
      REGISTRATION NUMBER: 30,162
      REFERENCE/DOCKET NUMBER: 02655/003004
    TELECOMMUNICATION INFORMATION:
      TELEPHONE: (617) 542-5070
      TELEFAX: (617) 542-8906
      TELEX: 200154
;
   INFORMATION FOR SEQ ID NO: 29:
    SEQUENCE CHARACTERISTICS:
      LENGTH: 11
      TYPE: amino acid
       STRANDEDNESS:
      TOPOLOGY: linear
US-07-958-903A-29
                         27.3%; Score 3; DB 1; Length 11;
  Query Match
  Best Local Similarity 100.0%; Pred. No. 2.7e+03;
           3; Conservative 0; Mismatches 0; Indels
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  Matches
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RESULT 17
US-07-958-903A-49
; Sequence 49, Application US/07958903A
; Patent No. 5652214
  GENERAL INFORMATION:
    APPLICANT: Lewis, Michael E.
    APPLICANT: Kauer, James C.
    APPLICANT: Smith, Kevin R.
    APPLICANT: Callison, Kathleen V.
    APPLICANT: Baldino, Frank
    APPLICANT: Neff, Nicola
    APPLICANT: Iqbal, Mohamed
    TITLE OF INVENTION: TREATING DISORDERS BY APPLICATION
    TITLE OF INVENTION: OF INSULIN-LIKE GROWTH FACTORS AND
    TITLE OF INVENTION: ANALOGS
    NUMBER OF SEQUENCES: 56
    CORRESPONDENCE ADDRESS:
      ADDRESSEE: Fish & Richardson
       STREET: 225 Franklin Street
       CITY: Boston
       STATE: Massachusetts
       COUNTRY: U.S.A.
       ZIP: 02110-2804
     COMPUTER READABLE FORM:
      MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
       COMPUTER: IBM PS/2 Model 50Z or 55SX
       OPERATING SYSTEM: MS-DOS (Version 5.0)
       SOFTWARE: WordPerfect (Version 5.1)
     CURRENT APPLICATION DATA:
       APPLICATION NUMBER: US/07/958,903A
       FILING DATE: October 7, 1992
       CLASSIFICATION: 514
     PRIOR APPLICATION DATA:
       APPLICATION NUMBER: 07/361,595
       FILING DATE: June 5, 1989
       APPLICATION NUMBER: 07/534,139
       FILING DATE: June 5, 1990
       APPLICATION NUMBER: 07/869,913
       FILING DATE: April 15, 1992
     ATTORNEY/AGENT INFORMATION:
       NAME: Clark, Paul T.
       REGISTRATION NUMBER: 30,162
       REFERENCE/DOCKET NUMBER: 02655/003004
     TELECOMMUNICATION INFORMATION:
       TELEPHONE: (617) 542-5070
       TELEFAX: (617) 542-8906
       TELEX: 200154
   INFORMATION FOR SEQ ID NO:
     SEQUENCE CHARACTERISTICS:
       LENGTH: 11
       TYPE: amino acid
       STRANDEDNESS:
       TOPOLOGY: linear
     FEATURE:
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OTHER INFORMATION: Xaa represents the D-isomer of tyrosine.
US-07-958-903A-49
                         27.3%; Score 3; DB 1; Length 11;
 Query Match
 Best Local Similarity 100.0%; Pred. No. 2.7e+03;
           3; Conservative 0; Mismatches 0; Indels
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           1 AKS 3
Qу
             III
           7 AKS 9
RESULT 18
US-08-416-962-11
; Sequence 11, Application US/08416962
; Patent No. 5668253
  GENERAL INFORMATION:
    APPLICANT: THANAVALA, YASMIN
    APPLICANT: THAKUR, ARVIND
    APPLICANT: ROITT, IVAN
    APPLICANT: PRIDE, MICHAEL
    TITLE OF INVENTION: ANTI-IDIOTYPIC ANTIBODY
    TITLE OF INVENTION: HAVING CORRESPONDENCE WITH HUMAN HEPATITIS
    TITLE OF INVENTION: B SURFACE ANTIGEN
    NUMBER OF SEQUENCES: 12
    CORRESPONDENCE ADDRESS:
      ADDRESSEE: DUNN & ASSOCIATES, P.C.
      STREET: P.O. BOX 96
      CITY: NEWFANE
      STATE: NEW YORK
      COUNTRY: USA
      ZIP: 14108
    COMPUTER READABLE FORM:
      MEDIUM TYPE: DISKETTE, 3.5 INCH, 1.44 MB
      COMPUTER: VICTOR 300 SX/25
      OPERATING SYSTEM: MS-DOS VERSION 5.0
      SOFTWARE: WORDSTAR PROFESSIONAL RELEASE 4
    CURRENT APPLICATION DATA:
      APPLICATION NUMBER: US/08/416,962
      FILING DATE: 05-APR-1995
;
      CLASSIFICATION: 530
    PRIOR APPLICATION DATA:
      APPLICATION NUMBER: 08/167,336
       FILING DATE: 15-DEC-1993
;
    ATTORNEY/AGENT INFORMATION:
      NAME: DUNN, MICHAEL L.
       REGISTRATION NUMBER: 25,330
       REFERENCE/DOCKET NUMBER: RPP:138 US
     TELECOMMUNICATION INFORMATION:
       TELEPHONE: (716) 433-1661
       TELEFAX: (716) 433-1665
   INFORMATION FOR SEQ ID NO: 11:
     SEQUENCE CHARACTERISTICS:
       LENGTH: 11
       TYPE: AMINO ACID
       STRANDEDNESS: UNKNOWN
       TOPOLOGY: UNKNOWN
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MOLECULE TYPE: PEPTIDE
    HYPOTHETICAL:
    ANTI-SENSE:
    FRAGMENT TYPE:
    ORIGINAL SOURCE:
      ORGANISM:
      STRAIN:
      INDIVIDUAL ISOLATE:
      DEVELOPMENTAL STAGE:
      HAPLOTYPE:
      TISSUE TYPE:
      CELL TYPE:
      CELL LINE:
      ORGANELLE:
    IMMEDIATE SOURCE:
      LIBRARY:
      CLONE:
    POSITION IN GENOME:
      CHROMOSOME/SEGMENT:
      MAP POSITION:
      UNITS:
    FEATURE:
      NAME/KEY:
      LOCATION:
      IDENTIFICATION METHOD:
;
      OTHER INFORMATION:
;
    PUBLICATION INFORMATION:
;
      AUTHORS:
      TITLE:
      JOURNAL:
      VOLUME:
      ISSUE:
      PAGES:
;
      DATE:
      DOCUMENT NUMBER:
      FILING DATE:
      PUBLICATION DATE:
      RELEVANT RESIDUES IN SEQ ID NO:
US-08-416-962-11
                          27.3%; Score 3; DB 1; Length 11;
 Query Match
 Best Local Similarity 100.0%; Pred. No. 2.7e+03;
           3; Conservative 0; Mismatches 0; Indels
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 Matches
            6 GNS 8
Qу
             -141
            7 GNS 9
Db
RESULT 19
US-08-445-745-119
; Sequence 119, Application US/08445745
; Patent No. 5672585
; GENERAL INFORMATION:
     APPLICANT: Pierschbacher, Michael D.
     APPLICANT: Cheng, Soan
    APPLICANT: Craig, William S.
```

```
APPLICANT: Tschopp, Juerg F.
    TITLE OF INVENTION: Methods and Composition for Treating
    TITLE OF INVENTION: Thrombosis
    NUMBER OF SEQUENCES:
                         168
    CORRESPONDENCE ADDRESS:
      ADDRESSEE: Campbell and Flores
      STREET: 4370 La Jolla Village Drive, Suite 700
      CITY: San Diego
      STATE: California
      COUNTRY: USA
      ZIP: 92122
    COMPUTER READABLE FORM:
      MEDIUM TYPE: Floppy disk
      COMPUTER: IBM PC compatible
      OPERATING SYSTEM: PC-DOS/MS-DOS
      SOFTWARE: PatentIn Release #1.0, Version #1.25
    CURRENT APPLICATION DATA:
;
      APPLICATION NUMBER: US/08/445,745
;
      FILING DATE:
ï
      CLASSIFICATION: 514
    PRIOR APPLICATION DATA:
      APPLICATION NUMBER: US 08/171,068
      FILING DATE: 20-DEC-1993
      APPLICATION NUMBER: US 08/079,441
      FILING DATE: 18-JUN-1993
    PRIOR APPLICATION DATA:
      APPLICATION NUMBER: US 08/050,73614
      FILING DATE: 14-APR-1993
    PRIOR APPLICATION DATA:
      APPLICATION NUMBER: US 07/681,119
      FILING DATE:
                    05-APR-1991
    PRIOR APPLICATION DATA:
      APPLICATION NUMBER: US 07/506,444
      FILING DATE: 06-APR-1990
    ATTORNEY/AGENT INFORMATION:
      NAME: Campbell, Cathryn A.
      REGISTRATION NUMBER: 31,815
      REFERENCE/DOCKET NUMBER: P-LA 9829
    TELECOMMUNICATION INFORMATION:
      TELEPHONE: (619) 535-9001
      TELEFAX: (619) 535-8949
   INFORMATION FOR SEQ ID NO:
     SEQUENCE CHARACTERISTICS:
      LENGTH: 11 amino acids
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      TYPE: amino acid
      TOPOLOGY: circular
US-08-445-745-119
                         27.3%; Score 3; DB 1; Length 11;
  Query Match
  Best Local Similarity 100.0%; Pred. No. 2.7e+03;
            3; Conservative 0; Mismatches 0; Indels
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                                                                            0;
  Matches
            4 RKG 6
Qу
              111
Db
            1 RKG 3
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RESULT 20
US-08-208-887A-38
; Sequence 38, Application US/08208887A
; Patent No. 5677421
   GENERAL INFORMATION:
    APPLICANT: Schlessinger, Joseph
    APPLICANT: Skolnick, Edward Y.
    APPLICANT: Margolis, Benjamin L.
    TITLE OF INVENTION: NOVEL EXPRESSION CLONING METHOD FOR
    TITLE OF INVENTION: IDENTIFYING TARGET PROTEINS FOR EUKARYOTIC TYROSINE
    TITLE OF INVENTION: KINASES AND NOVEL TARGET PROTEINS
    NUMBER OF SEQUENCES: 51
    CORRESPONDENCE ADDRESS:
       ADDRESSEE: PENNIE & EDMONDS
       STREET: 1155 Avenue of the Americas
       CITY: New York
       STATE: New York
       COUNTRY: 10036-2711
       ZIP: 10036-2711
;
     COMPUTER READABLE FORM:
      MEDIUM TYPE: Floppy disk
       COMPUTER: IBM PC compatible
       OPERATING SYSTEM: PC-DOS/MS-DOS
       SOFTWARE: PatentIn Release #1.0, Version #1.30
     CURRENT APPLICATION DATA:
       APPLICATION NUMBER: US/08/208,887A
;
       FILING DATE: 11-MAR-1994
;
       CLASSIFICATION: 435
ï
     ATTORNEY/AGENT INFORMATION:
      NAME: Coruzzi, Laura A.
       REGISTRATION NUMBER: 30,742
       REFERENCE/DOCKET NUMBER: 7683-063
     TELECOMMUNICATION INFORMATION:
       TELEPHONE: (212) 790-9090
ï
       TELEFAX: (212) 869-9741/8864
;
       TELEX: 66141 PENNIE
   INFORMATION FOR SEQ ID NO:
     SEQUENCE CHARACTERISTICS:
       LENGTH: 11 amino acids
       TYPE: amino acid
       TOPOLOGY: unknown
     MOLECULE TYPE: peptide
US-08-208-887A-38
                          27.3%; Score 3; DB 1; Length 11;
  Query Match
  Best Local Similarity 100.0%; Pred. No. 2.7e+03;
            3; Conservative 0; Mismatches 0; Indels
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                                                                            0;
  Matches
            7 NSS 9
Qу
              111
            3 NSS 5
Db
RESULT 21
US-08-467-420A-9
; Sequence 9, Application US/08467420A
; Patent No. 5683892
```

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GENERAL INFORMATION:
    APPLICANT: Ames, Robert S.
    APPLICANT: Appelbaum, Edward R. APPLICANT: Chaiken, Irwin M.
;
    APPLICANT: Cook, Richard M.
    APPLICANT: Gross, Mitchell S.
    APPLICANT: Holmes, Stephen D.
    APPLICANT: McMillan, Lynette J.
    APPLICANT: Theisen, Timothy W.
    TITLE OF INVENTION: Recombinant IL5 Antagonists Useful in
    TITLE OF INVENTION: Treatment of IL5 Mediated Disorders
    NUMBER OF SEQUENCES: 74
    CORRESPONDENCE ADDRESS:
      ADDRESSEE: SmithKline Beecham Corp./Corporate
      ADDRESSEE: Intellectual Property
      STREET: P. O. Box 1539-UW2220
      CITY: King of Prussia
       STATE: Pennsylvania
      COUNTRY: USA
       ZIP: 19406-0939
    COMPUTER READABLE FORM:
      MEDIUM TYPE: Floppy disk
       COMPUTER: IBM PC compatible
      OPERATING SYSTEM: PC-DOS/MS-DOS
       SOFTWARE: PatentIn Release #1.0, Version #1.25
     CURRENT APPLICATION DATA:
       APPLICATION NUMBER: US/08/467,420A
       FILING DATE:
;
       CLASSIFICATION: 536
     PRIOR APPLICATION DATA:
       APPLICATION NUMBER: US 08/363131
       FILING DATE: 23-DEC-1994
    ATTORNEY/AGENT INFORMATION:
       NAME: Sutton, Jeffrey A.
       REGISTRATION NUMBER: 34,028
       REFERENCE/DOCKET NUMBER: P50282
     TELECOMMUNICATION INFORMATION:
       TELEPHONE: 610 270-5024
       TELEFAX: 610 270-5090
   INFORMATION FOR SEQ ID NO:
     SEQUENCE CHARACTERISTICS:
       LENGTH: 11 amino acids
       TYPE: amino acid
       STRANDEDNESS: single
       TOPOLOGY: linear
     MOLECULE TYPE: protein
US-08-467-420A-9
                          27.3%; Score 3; DB 1; Length 11;
  Query Match
                          100.0%; Pred. No. 2.7e+03;
  Best Local Similarity
            3; Conservative 0; Mismatches 0; Indels
                                                                 0; Gaps
  Matches
            8 SSL 10
Qу
              111
Db
            4 SSL 6
```

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RESULT 22
US-08-470-110A-9
; Sequence 9, Application US/08470110A
; Patent No. 5693323
   GENERAL INFORMATION:
    APPLICANT: Ames, Robert S.
    APPLICANT: Appelbaum, Edward R.
    APPLICANT: Chaiken, Irwin M.
    APPLICANT: Cook, Richard M.
    APPLICANT: Gross, Mitchell S.
    APPLICANT: Holmes, Stephen D.
     APPLICANT: McMillan, Lynette J.
    APPLICANT: Theisen, Timothy W.
    TITLE OF INVENTION: Recombinant IL5 Antagonists Useful in
    TITLE OF INVENTION: Treatment of IL5 Mediated Disorders
    NUMBER OF SEQUENCES: 74
    CORRESPONDENCE ADDRESS:
      ADDRESSEE: SmithKline Beecham Corp./Corporate
                  Intellectual Property
      ADDRESSEE:
      STREET: P. O. Box 1539-UW2220
;
      CITY: King of Prussia
      STATE: Pennsylvania
      COUNTRY: USA
       ZIP: 19406-0939
;
     COMPUTER READABLE FORM:
;
      MEDIUM TYPE: Floppy disk
;
       COMPUTER: IBM PC compatible
      OPERATING SYSTEM: PC-DOS/MS-DOS
       SOFTWARE: PatentIn Release #1.0, Version #1.25
     CURRENT APPLICATION DATA:
      APPLICATION NUMBER: US/08/470,110A
       FILING DATE:
       CLASSIFICATION: 426
;
     PRIOR APPLICATION DATA:
;
       APPLICATION NUMBER: US 08/363131
       FILING DATE: 23-DEC-1994
     ATTORNEY/AGENT INFORMATION:
      NAME: Sutton, Jeffrey A.
       REGISTRATION NUMBER: 34,028
       REFERENCE/DOCKET NUMBER: P50282
     TELECOMMUNICATION INFORMATION:
       TELEPHONE: 610 270-5024
       TELEFAX: 610 270-5090
   INFORMATION FOR SEQ ID NO: 9:
     SEQUENCE CHARACTERISTICS:
       LENGTH: 11 amino acids
       TYPE: amino acid
       STRANDEDNESS: single
       TOPOLOGY: linear
     MOLECULE TYPE: protein
US-08-470-110A-9
                          27.3%; Score 3; DB 1; Length 11;
  Query Match
                         100.0%; Pred. No. 2.7e+03;
  Best Local Similarity
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                              0; Mismatches 0; Indels
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RESULT 23
US-08-462-018-5
; Sequence 5, Application US/08462018
; Patent No. 5703045
  GENERAL INFORMATION:
    APPLICANT: Lewis, Michael E.
    APPLICANT: Kauer, James C.
    APPLICANT: Smith, Kevin R.
    APPLICANT: Callison, Kathleen V.
    APPLICANT: Baldino, Frank
                Neff, Nicola
    APPLICANT:
                Igbal, Mohamed
    APPLICANT:
    TITLE OF INVENTION: TREATING DISORDERS BY APPLICATION
    TITLE OF INVENTION: OF INSULIN-LIKE GROWTH FACTORS AND
    TITLE OF INVENTION: ANALOGS
    NUMBER OF SEQUENCES: 56
     CORRESPONDENCE ADDRESS:
      ADDRESSEE: Fish & Richardson P.C.
      STREET: 225 Franklin Street
      CITY: Boston
      STATE: Massachusetts
      COUNTRY: U.S.A.
      ZIP: 02110-2804
    COMPUTER READABLE FORM:
      MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
      COMPUTER: IBM PS/2 Model 50Z or 55SX
      OPERATING SYSTEM: MS-DOS (Version 5.0)
       SOFTWARE: WordPerfect (Version 5.1)
     CURRENT APPLICATION DATA:
      APPLICATION NUMBER: US/08/462,018
       FILING DATE:
      CLASSIFICATION:
                       435
    PRIOR APPLICATION DATA:
     APPLICATION NUMBER: 07/958,903
      FILING DATE: October 7, 1992
      APPLICATION NUMBER: 07/361,595
      FILING DATE: June 5, 1989
      APPLICATION NUMBER: 07/534,139
       FILING DATE: June 5, 1990
      APPLICATION NUMBER: 07/869,913
       FILING DATE: April 15, 1992
     ATTORNEY/AGENT INFORMATION:
      NAME: Clark, Paul T.
      REGISTRATION NUMBER: 30,162
       REFERENCE/DOCKET NUMBER: 02655/003005
     TELECOMMUNICATION INFORMATION:
       TELEPHONE: (617) 542-5070
       TELEFAX: (617) 542-8906
       TELEX: 200154
   INFORMATION FOR SEQ ID NO: 5:
     SEQUENCE CHARACTERISTICS:
      LENGTH: 11
       TYPE: amino acid
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STRANDEDNESS:
      TOPOLOGY: linear
US-08-462-018-5
                        27.3%; Score 3; DB 1; Length 11;
 Query Match
 Best Local Similarity 100.0%; Pred. No. 2.7e+03;
           3; Conservative 0; Mismatches 0; Indels
                                                                           0;
                                                               0; Gaps
           1 AKS 3
QУ
             111
           8 AKS 10
Db
RESULT 24
US-08-462-018-9
; Sequence 9, Application US/08462018
; Patent No. 5703045
  GENERAL INFORMATION:
    APPLICANT: Lewis, Michael E.
    APPLICANT: Kauer, James C.
    APPLICANT: Smith, Kevin R.
    APPLICANT: Callison, Kathleen V.
    APPLICANT: Baldino, Frank
    APPLICANT: Neff, Nicola
    APPLICANT: Iqbal, Mohamed
    TITLE OF INVENTION: TREATING DISORDERS BY APPLICATION
    TITLE OF INVENTION: OF INSULIN-LIKE GROWTH FACTORS AND
    TITLE OF INVENTION: ANALOGS
    NUMBER OF SEQUENCES: 56
    CORRESPONDENCE ADDRESS:
      ADDRESSEE: Fish & Richardson P.C.
      STREET: 225 Franklin Street
      CITY: Boston
       STATE: Massachusetts
      COUNTRY: U.S.A.
      ZIP: 02110-2804
;
    COMPUTER READABLE FORM:
      MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
      COMPUTER: IBM PS/2 Model 50Z or 55SX
       OPERATING SYSTEM: MS-DOS (Version 5.0)
       SOFTWARE: WordPerfect (Version 5.1)
     CURRENT APPLICATION DATA:
      APPLICATION NUMBER: US/08/462,018
       FILING DATE:
;
       CLASSIFICATION: 435
     PRIOR APPLICATION DATA:
      APPLICATION NUMBER: 07/958,903
       FILING DATE: October 7, 1992
      APPLICATION NUMBER: 07/361,595
       FILING DATE: June 5, 1989
       APPLICATION NUMBER: 07/534,139
       FILING DATE: June 5, 1990
       APPLICATION NUMBER: 07/869,913
       FILING DATE: April 15, 1992
    ATTORNEY/AGENT INFORMATION:
       NAME: Clark, Paul T.
       REGISTRATION NUMBER: 30,162
```

```
REFERENCE/DOCKET NUMBER: 02655/003005
;
    TELECOMMUNICATION INFORMATION:
;
       TELEPHONE: (617) 542-5070
       TELEFAX: (617) 542-8906
       TELEX: 200154
   INFORMATION FOR SEQ ID NO: 9:
     SEQUENCE CHARACTERISTICS:
       LENGTH: 11
       TYPE: amino acid
       STRANDEDNESS:
       TOPOLOGY: linear
US-08-462-018-9
                          27.3%; Score 3; DB 1; Length 11;
  Query Match
  Best Local Similarity 100.0%; Pred. No. 2.7e+03;
  Matches 3; Conservative 0; Mismatches 0; Indels
                                                                   0; Gaps
                                                                               0;
        1 AKS 3
Qу
             7 AKS 9
Db
RESULT 25
US-08-462-018-10
; Sequence 10, Application US/08462018
; Patent No. 5703045
   GENERAL INFORMATION:
     APPLICANT: Lewis, Michael E.
    APPLICANT: Kauer, James C.
    APPLICANT: Smith, Kevin R.
    APPLICANT: Callison, Kathleen V.
    APPLICANT: Baldino, Frank
    APPLICANT: Neff, Nicola
     APPLICANT: Igbal, Mohamed
    TITLE OF INVENTION: TREATING DISORDERS BY APPLICATION TITLE OF INVENTION: OF INSULIN-LIKE GROWTH FACTORS AND TITLE OF INVENTION: ANALOGS
     NUMBER OF SEQUENCES: 56
     CORRESPONDENCE ADDRESS:
      ADDRESSEE: Fish & Richardson P.C.
       STREET: 225 Franklin Street
       CITY: Boston
       STATE: Massachusetts
       COUNTRY: U.S.A.
;
       ZIP: 02110-2804
     COMPUTER READABLE FORM:
       MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
       COMPUTER: IBM PS/2 Model 50Z or 55SX
       OPERATING SYSTEM: MS-DOS (Version 5.0)
       SOFTWARE: WordPerfect (Version 5.1)
     CURRENT APPLICATION DATA:
       APPLICATION NUMBER: US/08/462,018
       FILING DATE:
       CLASSIFICATION: 435
     PRIOR APPLICATION DATA:
       APPLICATION NUMBER: 07/958,903
       FILING DATE: October 7, 1992
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APPLICATION NUMBER: 07/361,595
;
      FILING DATE: June 5, 1989
;
      APPLICATION NUMBER: 07/534,139
      FILING DATE: June 5, 1990
      APPLICATION NUMBER: 07/869,913
      FILING DATE: April 15, 1992
    ATTORNEY/AGENT INFORMATION:
      NAME: Clark, Paul T.
      REGISTRATION NUMBER: 30,162
;
      REFERENCE/DOCKET NUMBER: 02655/003005
    TELECOMMUNICATION INFORMATION:
      TELEPHONE: (617) 542-5070
      TELEFAX: (617) 542-8906
      TELEX: 200154
  INFORMATION FOR SEQ ID NO: 10:
    SEQUENCE CHARACTERISTICS:
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      LENGTH: 11
;
      TYPE: amino acid
      STRANDEDNESS:
      TOPOLOGY: linear
US-08-462-018-10
                         27.3%; Score 3; DB 1; Length 11;
 Query Match
 Best Local Similarity 100.0%; Pred. No. 2.7e+03;
                             0; Mismatches 0; Indels 0;
                                                                   Gaps
 Matches 3; Conservative
           1 AKS 3
Qу
             +11
           7 AKS 9
Db
RESULT 26
US-08-462-018-29
; Sequence 29, Application US/08462018
; Patent No. 5703045
  GENERAL INFORMATION:
    APPLICANT: Lewis, Michael E.
    APPLICANT: Kauer, James C.
    APPLICANT: Smith, Kevin R.
    APPLICANT: Callison, Kathleen V.
    APPLICANT: Baldino, Frank
    APPLICANT: Neff, Nicola
    APPLICANT: Iqbal, Mohamed
    TITLE OF INVENTION: TREATING DISORDERS BY APPLICATION
    TITLE OF INVENTION: OF INSULIN-LIKE GROWTH FACTORS AND
    TITLE OF INVENTION: ANALOGS
    NUMBER OF SEQUENCES: 56
    CORRESPONDENCE ADDRESS:
       ADDRESSEE: Fish & Richardson P.C.
       STREET: 225 Franklin Street
       CITY: Boston
       STATE: Massachusetts
       COUNTRY: U.S.A.
       ZIP: 02110-2804
     COMPUTER READABLE FORM:
       MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
       COMPUTER: IBM PS/2 Model 50Z or 55SX
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OPERATING SYSTEM: MS-DOS (Version 5.0)
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      SOFTWARE: WordPerfect (Version 5.1)
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    CURRENT APPLICATION DATA:
      APPLICATION NUMBER: US/08/462,018
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      FILING DATE:
      CLASSIFICATION: 435
    PRIOR APPLICATION DATA:
      APPLICATION NUMBER: 07/958,903
      FILING DATE: October 7, 1992
;
      APPLICATION NUMBER: 07/361,595
      FILING DATE: June 5, 1989
      APPLICATION NUMBER: 07/534,139
      FILING DATE: June 5, 1990
      APPLICATION NUMBER: 07/869,913
      FILING DATE: April 15, 1992
;
    ATTORNEY/AGENT INFORMATION:
      NAME: Clark, Paul T.
;
      REGISTRATION NUMBER: 30,162
;
      REFERENCE/DOCKET NUMBER: 02655/003005
    TELECOMMUNICATION INFORMATION:
      TELEPHONE: (617) 542-5070
      TELEFAX: (617) 542-8906
      TELEX: 200154
   INFORMATION FOR SEQ ID NO: 29:
    SEQUENCE CHARACTERISTICS:
;
      LENGTH: 11
;
      TYPE: amino acid
      STRANDEDNESS:
      TOPOLOGY: linear
US-08-462-018-29
                         27.3%; Score 3; DB 1; Length 11;
  Query Match
  Best Local Similarity 100.0%; Pred. No. 2.7e+03;
           3; Conservative 0; Mismatches 0; Indels 0; Gaps
  Matches
           1 AKS 3
Qу
             -111
           7 AKS 9
Dh
RESULT 27
US-08-462-018-49
; Sequence 49, Application US/08462018
; Patent No. 5703045
   GENERAL INFORMATION:
    APPLICANT: Lewis, Michael E.
     APPLICANT: Kauer, James C.
    APPLICANT: Smith, Kevin R.
    APPLICANT: Callison, Kathleen V.
     APPLICANT: Baldino, Frank
;
     APPLICANT: Neff, Nicola
;
    APPLICANT: Iqbal, Mohamed
     TITLE OF INVENTION: TREATING DISORDERS BY APPLICATION
     TITLE OF INVENTION: OF INSULIN-LIKE GROWTH FACTORS AND
     TITLE OF INVENTION: ANALOGS
    NUMBER OF SEQUENCES: 56
     CORRESPONDENCE ADDRESS:
```

```
ADDRESSEE: Fish & Richardson P.C.
      STREET: 225 Franklin Street
      CITY: Boston
      STATE: Massachusetts
      COUNTRY: U.S.A.
      ZIP: 02110-2804
    COMPUTER READABLE FORM:
      MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
      COMPUTER: IBM PS/2 Model 50Z or 55SX
      OPERATING SYSTEM: MS-DOS (Version 5.0)
      SOFTWARE: WordPerfect (Version 5.1)
    CURRENT APPLICATION DATA:
      APPLICATION NUMBER: US/08/462,018
      FILING DATE:
      CLASSIFICATION: 435
    PRIOR APPLICATION DATA:
     APPLICATION NUMBER: 07/958,903
      FILING DATE: October 7, 1992
      APPLICATION NUMBER: 07/361,595
į
      FILING DATE: June 5, 1989
      APPLICATION NUMBER: 07/534,139
      FILING DATE: June 5, 1990
     APPLICATION NUMBER: 07/869,913
     FILING DATE: April 15, 1992
    ATTORNEY/AGENT INFORMATION:
     NAME: Clark, Paul T.
      REGISTRATION NUMBER: 30,162
     REFERENCE/DOCKET NUMBER: 02655/003005
    TELECOMMUNICATION INFORMATION:
    TELEPHONE: (617) 542-5070
      TELEFAX: (617) 542-8906
      TELEX: 200154
  INFORMATION FOR SEQ ID NO: 49:
   SEQUENCE CHARACTERISTICS:
      LENGTH: 11
      TYPE: amino acid
      STRANDEDNESS:
      TOPOLOGY: linear
    FEATURE:
      OTHER INFORMATION: Xaa represents the D-isomer of tyrosine.
US-08-462-018-49
                         27.3%; Score 3; DB 1; Length 11;
 Query Match
 Best Local Similarity 100.0%; Pred. No. 2.7e+03;
         3; Conservative 0; Mismatches 0; Indels 0; Gaps
                                                                          0:
           1 AKS 3
Qу
             -111
           7 AKS 9
RESULT 28
US-08-596-864-9
; Sequence 9, Application US/08596864
; Patent No. 5731183
; GENERAL INFORMATION:
    APPLICANT: KOBAYASHI, KATSUNORI
```

```
APPLICANT: YAMANAKA, SHIGERU
;
    APPLICANT: MIWA, KIYOSHI
;
    APPLICANT: SUZUKI, SHUNICHI
    APPLICANT: ETO, YUZURU
    APPLICANT: TANITA, YUKO
    APPLICANT: YOKOZEKI, KENZO
    APPLICANT: HASHIGUCHI, KENICHI
    TITLE OF INVENTION: BACILLUS-DERIVED TRANSGLUTAMINASE
    NUMBER OF SEQUENCES: 9
    CORRESPONDENCE ADDRESS:
      ADDRESSEE: OBLON, SPIVAK, MCCLELLEAND, MAIER & NEUSTADT,
      ADDRESSEE: P.C.
      STREET: 1755 S. JEFFERSON DAVIS HIGHWAY, SUITE 400
      CITY: ARLINGTON
      STATE: VA
      COUNTRY: USA
      ZIP: 22202
    COMPUTER READABLE FORM:
      MEDIUM TYPE: Floppy disk
      COMPUTER: IBM PC compatible
      OPERATING SYSTEM: PC-DOS/MS-DOS
      SOFTWARE: PatentIn Release #1.0, Version #1.30
    CURRENT APPLICATION DATA:
      APPLICATION NUMBER: US/08/596,864
      FILING DATE: 09-FEB-1996
;
      CLASSIFICATION: 435
    PRIOR APPLICATION DATA:
ï
      APPLICATION NUMBER: JP 021963/1995
;
      FILING DATE: 09-FEB-1995
    PRIOR APPLICATION DATA:
      APPLICATION NUMBER: JP 226316/1995
       FILING DATE: 04-SEP-1995
    PRIOR APPLICATION DATA:
      APPLICATION NUMBER: JP 013072/1996
       FILING DATE: 29-JAN-1996
;
    ATTORNEY/AGENT INFORMATION:
;
      NAME: OBLON, NORMAN F.
       REGISTRATION NUMBER: 24,618
       REFERENCE/DOCKET NUMBER: 10-786-0
     TELECOMMUNICATION INFORMATION:
       TELEPHONE: 703-413-3000
       TELEFAX: 703-413-2220
   INFORMATION FOR SEQ ID NO:
     SEQUENCE CHARACTERISTICS:
       LENGTH: 11 amino acids
       TYPE: amino acid
       STRANDEDNESS: single
       TOPOLOGY: linear
     MOLECULE TYPE: peptide
US-08-596-864-9
                         27.3%; Score 3; DB 1; Length 11;
  Query Match
  Best Local Similarity 100.0%; Pred. No. 2.7e+03;
  Matches 3; Conservative 0; Mismatches 0; Indels
                                                                            0;
                                                                0; Gaps
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RESULT 29
US-08-422-101-3
; Sequence 3, Application US/08422101
; Patent No. 5739277
  GENERAL INFORMATION:
    APPLICANT: Leonard Presta
    APPLICANT: Brad Snedecor
    TITLE OF INVENTION: Altered Polypeptides with Increased
    TITLE OF INVENTION: Half-Life
    NUMBER OF SEQUENCES: 31
    CORRESPONDENCE ADDRESS:
      ADDRESSEE: Genentech, Inc.
      STREET: 460 Point San Bruno Blvd
      CITY: South San Francisco
      STATE: California
      COUNTRY: USA
            94080
      ZIP:
    COMPUTER READABLE FORM:
      MEDIUM TYPE: 5.25 inch, 360 Kb floppy disk
      COMPUTER: IBM PC compatible
      OPERATING SYSTEM: PC-DOS/MS-DOS
      SOFTWARE: patin (Genentech)
     CURRENT APPLICATION DATA:
      APPLICATION NUMBER: US/08/422,101
      FILING DATE: 14-APR-1995
;
      CLASSIFICATION: 530
    PRIOR APPLICATION DATA:
      APPLICATION NUMBER:
      FILING DATE:
    ATTORNEY/AGENT INFORMATION:
      NAME: Lee, Wendy M.
      REGISTRATION NUMBER:
      REFERENCE/DOCKET NUMBER:
    TELECOMMUNICATION INFORMATION:
      TELEPHONE: 415/225-1994
      TELEFAX: 415/952-9881
       TELEX: 910/371-7168
   INFORMATION FOR SEQ ID NO:
     SEQUENCE CHARACTERISTICS:
       LENGTH: 11 amino acids
       TYPE: amino acid
       TOPOLOGY: linear
US-08-422-101-3
                         27.3%; Score 3; DB 1; Length 11;
  Query Match
  Best Local Similarity 100.0%; Pred. No. 2.7e+03;
                              0; Mismatches 0; Indels
                                                                            0;
            3; Conservative
                                                                0; Gaps
  Matches
            7 NSS 9
Qy
              111
            3 NSS 5
Db
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US-08-589-011-11
; Sequence 11, Application US/08589011
; Patent No. 5744135
; GENERAL INFORMATION:
    APPLICANT: THANAVALA, YASMIN
    APPLICANT: THAKUR, ARVIND
    APPLICANT: ROITT, IVAN
    APPLICANT: PRIDE, MICHAEL
    TITLE OF INVENTION: ANTI-IDIOTYPIC ANTIBODY
    TITLE OF INVENTION: HAVING CORRESPONDENCE WITH HUMAN HEPATITIS
    TITLE OF INVENTION: B SURFACE ANTIGEN
    NUMBER OF SEQUENCES: 12
    CORRESPONDENCE ADDRESS:
      ADDRESSEE: DUNN & ASSOCIATES, P.C.
      STREET: P.O. BOX 96
      CITY: NEWFANE
      STATE: NEW YORK
      COUNTRY: USA
      ZIP: 14108
;
    COMPUTER READABLE FORM:
      MEDIUM TYPE: DISKETTE, 3.5 INCH, 1.44 MB
      COMPUTER: VICTOR 300 SX/25
      OPERATING SYSTEM: MS-DOS VERSION 5.0
      SOFTWARE: WORDSTAR PROFESSIONAL RELEASE 4
    CURRENT APPLICATION DATA:
      APPLICATION NUMBER: US/08/589,011
;
      FILING DATE: 19-JAN-1996
;
      CLASSIFICATION: 424
    PRIOR APPLICATION DATA:
      APPLICATION NUMBER: 08/167,336
       FILING DATE: 15-DEC-1993
    ATTORNEY/AGENT INFORMATION:
      NAME: DUNN, MICHAEL L.
      REGISTRATION NUMBER: 25,330
;
      REFERENCE/DOCKET NUMBER: RPP:138 US
;
     TELECOMMUNICATION INFORMATION:
       TELEPHONE: (716) 433-1661
       TELEFAX: (716) 433-1665
   INFORMATION FOR SEQ ID NO: 11:
     SEQUENCE CHARACTERISTICS:
     LENGTH: 11
       TYPE: AMINO ACID
       STRANDEDNESS: UNKNOWN
       TOPOLOGY: UNKNOWN
    MOLECULE TYPE: PEPTIDE
    HYPOTHETICAL:
    ANTI-SENSE:
    FRAGMENT TYPE:
     ORIGINAL SOURCE:
       ORGANISM:
       STRAIN:
       INDIVIDUAL ISOLATE:
      DEVELOPMENTAL STAGE:
;
     HAPLOTYPE:
     TISSUE TYPE:
     CELL TYPE:
     CELL LINE:
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ORGANELLE:
;
    IMMEDIATE SOURCE:
;
      LIBRARY:
      CLONE:
    POSITION IN GENOME:
     CHROMOSOME/SEGMENT:
     MAP POSITION:
     UNITS:
    FEATURE:
;
      NAME/KEY:
;
      LOCATION:
      IDENTIFICATION METHOD:
      OTHER INFORMATION:
     PUBLICATION INFORMATION:
     AUTHORS:
      TITLE:
;
      JOURNAL:
;
      VOLUME:
;
      ISSUE:
     PAGES:
      DATE:
      DOCUMENT NUMBER:
      FILING DATE:
      PUBLICATION DATE:
      RELEVANT RESIDUES IN SEQ ID NO:
US-08-589-011-11
                         27.3%; Score 3; DB 1; Length 11;
  Query Match
  Best Local Similarity 100.0%; Pred. No. 2.7e+03;
 Matches 3; Conservative 0; Mismatches 0; Indels
                                                             0; Gaps
           6 GNS 8
Qу
             7 GNS 9
Db
RESULT 31
US-08-422-091-3
; Sequence 3, Application US/08422091
; Patent No. 5747035
; GENERAL INFORMATION:
    APPLICANT: Leonard Presta
     APPLICANT: Brad Snedecor
     TITLE OF INVENTION: Altered Polypeptides with Increased
     TITLE OF INVENTION: Half-Life
     NUMBER OF SEQUENCES: 31
     CORRESPONDENCE ADDRESS:
       ADDRESSEE: Genentech, Inc.
       STREET: 460 Point San Bruno Blvd
       CITY: South San Francisco
       STATE: California
       COUNTRY: USA
       ZIP: 94080
     COMPUTER READABLE FORM:
     MEDIUM TYPE: 5.25 inch, 360 Kb floppy disk
      COMPUTER: IBM PC compatible
       OPERATING SYSTEM: PC-DOS/MS-DOS
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SOFTWARE: patin (Genentech)
    CURRENT APPLICATION DATA:
      APPLICATION NUMBER: US/08/422,091
      FILING DATE: 14-APR-1995
      CLASSIFICATION: 424
    PRIOR APPLICATION DATA:
     APPLICATION NUMBER:
      FILING DATE:
    ATTORNEY/AGENT INFORMATION:
    NAME: Lee, Wendy M.
      REGISTRATION NUMBER:
      REFERENCE/DOCKET NUMBER: 932-6
    TELECOMMUNICATION INFORMATION:
      TELEPHONE: 415/225-1994
    TELEFAX: 415/952-9881
      TELEX: 910/371-7168
  INFORMATION FOR SEQ ID NO: 3:
    SEQUENCE CHARACTERISTICS:
      LENGTH: 11 amino acids
      TYPE: amino acid
      TOPOLOGY: linear
US-08-422-091-3
                       27.3%; Score 3; DB 1; Length 11;
 Query Match
 Best Local Similarity 100.0%; Pred. No. 2.7e+03;
 Matches 3; Conservative 0; Mismatches 0; Indels
                                                                          0;
           7 NSS 9
Qy
            111
           3 NSS 5
Db
RESULT 32
US-08-040-548-43
; Sequence 43, Application US/08040548
; Patent No. 5763209
: GENERAL INFORMATION:
; APPLICANT: Sukhatme, Vikas P.
    TITLE OF INVENTION: METHODS AND MATERIALS RELATING TO THE
    TITLE OF INVENTION: FUNCTIONAL DOMAINS OF DNA BINDING PROTEINS
    NUMBER OF SEQUENCES: 67
    CORRESPONDENCE ADDRESS:
      ADDRESSEE: Arnold, White & Durkee
      STREET: 321 No. 5763209th Clark Street, Suite 800
      CITY: Chicago
      STATE: Illinois
      COUNTRY: U.S.A.
      ZIP: 60610
    COMPUTER READABLE FORM:
      MEDIUM TYPE: Floppy disk
      COMPUTER: IBM PC compatible
      OPERATING SYSTEM: PC-DOS/MS-DOS
      SOFTWARE: PatentIn Release #1.0, Version #1.25
    CURRENT APPLICATION DATA:
     APPLICATION NUMBER: US/08/040,548
      FILING DATE:
      CLASSIFICATION: 514
```

```
ATTORNEY/AGENT INFORMATION:
      NAME: Coughlin, Daniel F.
      REGISTRATION NUMBER: 36,111
      REFERENCE/DOCKET NUMBER: arcd067
    TELECOMMUNICATION INFORMATION:
      TELEPHONE: (312) 744-0090
      TELEFAX: (312) 245-4961
  INFORMATION FOR SEQ ID NO: 43:
    SEQUENCE CHARACTERISTICS:
      LENGTH: 11 amino acids
      TYPE: amino acid
      STRANDEDNESS: single
      TOPOLOGY: linear
    MOLECULE TYPE: peptide
US-08-040-548-43
                         27.3%; Score 3; DB 1; Length 11;
 Query Match
                         100.0%; Pred. No. 2.7e+03;
 Best Local Similarity
            3; Conservative 0; Mismatches 0; Indels 0; Gaps
 Matches
           7 NSS 9
Qу
             -111
           2 NSS 4
RESULT 33
US-08-466-344-43
; Sequence 43, Application US/08466344
; Patent No. 5773583
   GENERAL INFORMATION:
    APPLICANT: Sukhatme, Vikas P.
    TITLE OF INVENTION: METHODS AND MATERIALS RELATING TO THE
    TITLE OF INVENTION: FUNCTIONAL DOMAINS OF DNA BINDING PROTEINS
    NUMBER OF SEQUENCES: 67
    CORRESPONDENCE ADDRESS:
      ADDRESSEE: Arnold, White & Durkee
       STREET: 321 No. 5773583th Clark Street, Suite 800
      CITY: Chicago
       STATE: Illinois
      COUNTRY: U.S.A.
       ZIP: 60610
    COMPUTER READABLE FORM:
      MEDIUM TYPE: Floppy disk
       COMPUTER: IBM PC compatible
      OPERATING SYSTEM: PC-DOS/MS-DOS
       SOFTWARE: PatentIn Release #1.0, Version #1.25
     CURRENT APPLICATION DATA:
      APPLICATION NUMBER: US/08/466,344
       FILING DATE: 06-JUN-1995
       CLASSIFICATION: 514
     PRIOR APPLICATION DATA:
       APPLICATION NUMBER: 08/040,548
       FILING DATE: 31-MAR-1993
    ATTORNEY/AGENT INFORMATION:
      NAME: Coughlin, Daniel F.
       REGISTRATION NUMBER: 36,111
       REFERENCE/DOCKET NUMBER: arcd067
```

```
TELECOMMUNICATION INFORMATION:
      TELEPHONE: (312) 744-0090
       TELEFAX: (312) 245-4961
  INFORMATION FOR SEQ ID NO: 43:
    SEQUENCE CHARACTERISTICS:
      LENGTH: 11 amino acids
      TYPE: amino acid
      STRANDEDNESS: single
      TOPOLOGY: linear
    MOLECULE TYPE: peptide
US-08-466-344-43
                         27.3%; Score 3; DB 1; Length 11;
 Query Match
 Best Local Similarity 100.0%; Pred. No. 2.7e+03;
           3; Conservative 0; Mismatches 0; Indels
                                                                0; Gaps 0;
           7 NSS 9
             -111
            2 NSS 4
RESULT 34
US-08-823-245-5
; Sequence 5, Application US/08823245
; Patent No. 5776897
 GENERAL INFORMATION:
    APPLICANT: Lewis, Michael
APPLICANT: Kauer, James C.
APPLICANT: Smith, Kevin R.
;
ï
    APPLICANT: Callison, Kathleen V.
    APPLICANT: Baldino, Frank
    APPLICANT: Neff, Nicola
;
    APPLICANT: Igbal, Mohamed
    TITLE OF INVENTION: TREATING DISORDERS BY
    TITLE OF INVENTION: APPLICATION
    TITLE OF INVENTION: OF INSULIN-LIKE GROWTH TITLE OF INVENTION: FACTORS AND
    TITLE OF INVENTION: ANALOGS
    NUMBER OF SEQUENCES: 56
     CORRESPONDENCE ADDRESS:
      ADDRESSEE: Fish & Richardson
       STREET: 225 Franklin Street
       CITY: Boston
       STATE: Massachusetts
       COUNTRY: U.S.A.
       ZIP: 02110-2804
     COMPUTER READABLE FORM:
       MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
       COMPUTER: IBM PS/2 Model 50Z or
       COMPUTER: 55SX
       OPERATING SYSTEM: MS-DOS (Version 5.0)
       SOFTWARE: WordPerfect (Version
       SOFTWARE: 5.1)
     CURRENT APPLICATION DATA:
     APPLICATION NUMBER: US/08/823,245
       FILING DATE: March 24, 1997
       CLASSIFICATION: 514
```

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PRIOR APPLICATION DATA:
      APPLICATION NUMBER: 07/361,595
      FILING DATE: June 6, 1989
      APPLICATION NUMBER: 07/534,139
      FILING DATE: June 5, 1990
      APPLICATION NUMBER: 07/869,913
      FILING DATE: April 15, 1992
      APPLICATION NUMBER: 07/958,903
      FILING DATE: October 7, 1992
    ATTORNEY/AGENT INFORMATION:
      NAME: Creeson, Gary L.
      REGISTRATION NUMBER: 34,310
      REFERENCE/DOCKET NUMBER: 02655/003008
    TELECOMMUNICATION INFORMATION:
      TELEPHONE: (617) 542-5070
      TELEFAX: (617) 542-8906
      TELEX: 200154
  INFORMATION FOR SEQ ID NO: 5:
    SEQUENCE CHARACTERISTICS:
      LENGTH: 11
      TYPE: amino acid
      STRANDEDNESS: N/A
      TOPOLOGY: N/A
US-08-823-245-5
                         27.3%; Score 3; DB 1; Length 11;
 Query Match
 Best Local Similarity 100.0%; Pred. No. 2.7e+03;
           3; Conservative 0; Mismatches 0; Indels
                                                            0; Gaps
                                                                           0;
 Matches
           1 AKS 3
Qy
             111
           8 AKS 10
RESULT 35
US-08-823-245-9
; Sequence 9, Application US/08823245
; Patent No. 5776897
  GENERAL INFORMATION:
    APPLICANT: Lewis, Michael
    APPLICANT: Kauer, James C.
    APPLICANT: Smith, Kevin R.
    APPLICANT: Callison, Kathleen V.
    APPLICANT: Baldino, Frank
    APPLICANT: Neff, Nicola
    APPLICANT: Iqbal, Mohamed
    TITLE OF INVENTION: TREATING DISORDERS BY
    TITLE OF INVENTION: APPLICATION
    TITLE OF INVENTION: OF INSULIN-LIKE GROWTH
    TITLE OF INVENTION: FACTORS AND
    TITLE OF INVENTION: ANALOGS
    NUMBER OF SEQUENCES: 56
    CORRESPONDENCE ADDRESS:
      ADDRESSEE: Fish & Richardson
      STREET: 225 Franklin Street
      CITY: Boston
      STATE: Massachusetts
```

```
ZIP: 02110-2804
    COMPUTER READABLE FORM:
      MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
      COMPUTER: IBM PS/2 Model 50Z or
      COMPUTER: 55SX
      OPERATING SYSTEM: MS-DOS (Version 5.0)
      SOFTWARE: WordPerfect (Version
      SOFTWARE: 5.1)
    CURRENT APPLICATION DATA:
;
      APPLICATION NUMBER: US/08/823,245
      FILING DATE: March 24, 1997
      CLASSIFICATION: 514
    PRIOR APPLICATION DATA:
      APPLICATION NUMBER: 07/361,595
      FILING DATE: June 6, 1989
      APPLICATION NUMBER: 07/534,139
      FILING DATE: June 5, 1990
;
      APPLICATION NUMBER: 07/869,913
      FILING DATE: April 15, 1992
      APPLICATION NUMBER: 07/958,903
      FILING DATE: October 7, 1992
    ATTORNEY/AGENT INFORMATION:
      NAME: Creeson, Gary L.
      REGISTRATION NUMBER: 34,310
;
      REFERENCE/DOCKET NUMBER: 02655/003008
    TELECOMMUNICATION INFORMATION:
;
      TELEPHONE: (617) 542-5070
      TELEFAX: (617) 542-8906
      TELEX: 200154
  INFORMATION FOR SEQ ID NO: 9:
    SEQUENCE CHARACTERISTICS:
      LENGTH: 11
      TYPE: amino acid
      STRANDEDNESS: N/A
      TOPOLOGY: N/A
US-08-823-245-9
                         27.3%; Score 3; DB 1; Length 11;
 Query Match
 Best Local Similarity 100.0%; Pred. No. 2.7e+03;
                                                                           0;
           3; Conservative 0; Mismatches 0; Indels
                                                               0; Gaps
 Matches
Qу
           1 AKS 3
             -1.11
           7 AKS 9
Db
RESULT 36
US-08-823-245-10
; Sequence 10, Application US/08823245
; Patent No. 5776897
; GENERAL INFORMATION:
    APPLICANT: Lewis, Michael
    APPLICANT: Kauer, James C.
   APPLICANT: Smith, Kevin R.
   APPLICANT: Callison, Kathleen V.
    APPLICANT: Baldino, Frank
```

COUNTRY: U.S.A.

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```
APPLICANT: Neff, Nicola
    APPLICANT: Iqbal, Mohamed
    TITLE OF INVENTION: TREATING DISORDERS BY
;
    TITLE OF INVENTION: APPLICATION
    TITLE OF INVENTION: OF INSULIN-LIKE GROWTH
    TITLE OF INVENTION: FACTORS AND
    TITLE OF INVENTION: ANALOGS
    NUMBER OF SEQUENCES: 56
    CORRESPONDENCE ADDRESS:
      ADDRESSEE: Fish & Richardson
;
      STREET: 225 Franklin Street
      CITY: Boston
      STATE: Massachusetts
      COUNTRY: U.S.A.
     ZIP: 02110-2804
    COMPUTER READABLE FORM:
      MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
      COMPUTER: IBM PS/2 Model 50Z or
      COMPUTER: 55SX
      OPERATING SYSTEM: MS-DOS (Version 5.0)
     SOFTWARE: WordPerfect (Version
      SOFTWARE: 5.1)
    CURRENT APPLICATION DATA:
      APPLICATION NUMBER: US/08/823,245
      FILING DATE: March 24, 1997
;
      CLASSIFICATION: 514
    PRIOR APPLICATION DATA:
      APPLICATION NUMBER: 07/361,595
      FILING DATE: June 6, 1989
    APPLICATION NUMBER: 07/534,139
      FILING DATE: June 5, 1990
      APPLICATION NUMBER: 07/869,913
      FILING DATE: April 15, 1992
      APPLICATION NUMBER: 07/958,903
      FILING DATE: October 7, 1992
    ATTORNEY/AGENT INFORMATION:
      NAME: Creeson, Gary L.
      REGISTRATION NUMBER: 34,310
      REFERENCE/DOCKET NUMBER: 02655/003008
    TELECOMMUNICATION INFORMATION:
      TELEPHONE: (617) 542-5070
      TELEFAX: (617) 542-8906
      TELEX: 200154
  INFORMATION FOR SEQ ID NO: 10:
    SEQUENCE CHARACTERISTICS:
    LENGTH: 11
      TYPE: amino acid
      STRANDEDNESS: N/A
      TOPOLOGY: N/A
US-08-823-245-10
  Query Match
                        27.3%; Score 3; DB 1; Length 11;
  Best Local Similarity 100.0%; Pred. No. 2.7e+03;
 Matches 3; Conservative 0; Mismatches 0; Indels
                                                            0; Gaps
```

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RESULT 37
US-08-823-245-29
; Sequence 29, Application US/08823245
; Patent No. 5776897
  GENERAL INFORMATION:
    APPLICANT: Lewis, Michael
    APPLICANT:
               Kauer, James C.
                Smith, Kevin R.
    APPLICANT:
    APPLICANT:
                Callison, Kathleen V.
    APPLICANT: Baldino, Frank
    APPLICANT:
                Neff, Nicola
                Igbal, Mohamed
    APPLICANT:
     TITLE OF INVENTION: TREATING DISORDERS BY
     TITLE OF INVENTION: APPLICATION
    TITLE OF INVENTION: OF INSULIN-LIKE GROWTH
    TITLE OF INVENTION: FACTORS AND
    TITLE OF INVENTION: ANALOGS
    NUMBER OF SEQUENCES: 56
     CORRESPONDENCE ADDRESS:
      ADDRESSEE: Fish & Richardson
      STREET: 225 Franklin Street
      CITY: Boston
       STATE: Massachusetts
       COUNTRY: U.S.A.
       ZIP: 02110-2804
     COMPUTER READABLE FORM:
      MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
       COMPUTER: IBM PS/2 Model 50Z or
                 55SX
       COMPUTER:
       OPERATING SYSTEM: MS-DOS (Version 5.0)
       SOFTWARE: WordPerfect (Version
       SOFTWARE:
                 5.1)
     CURRENT APPLICATION DATA:
       APPLICATION NUMBER: US/08/823,245
       FILING DATE: March 24, 1997
       CLASSIFICATION: 514
     PRIOR APPLICATION DATA:
       APPLICATION NUMBER: 07/361,595
       FILING DATE: June 6, 1989
       APPLICATION NUMBER: 07/534,139
       FILING DATE: June 5, 1990
       APPLICATION NUMBER: 07/869,913
       FILING DATE: April 15, 1992
       APPLICATION NUMBER: 07/958,903
       FILING DATE: October 7, 1992
     ATTORNEY/AGENT INFORMATION:
       NAME: Creeson, Gary L.
       REGISTRATION NUMBER: 34,310
       REFERENCE/DOCKET NUMBER: 02655/003008
     TELECOMMUNICATION INFORMATION:
       TELEPHONE: (617) 542-5070
       TELEFAX: (617) 542-8906
       TELEX: 200154
   INFORMATION FOR SEQ ID NO: 29:
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SEQUENCE CHARACTERISTICS:
;
      LENGTH: 11
      TYPE: amino acid
      STRANDEDNESS: N/A
      TOPOLOGY: N/A
US-08-823-245-29
                         27.3%; Score 3; DB 1; Length 11;
 Query Match
 Best Local Similarity 100.0%; Pred. No. 2.7e+03;
 Matches 3; Conservative 0; Mismatches 0; Indels 0; Gaps
                                                                            0;
           1 AKS 3
Qу
             111
           7 AKS 9
RESULT 38
US-08-823-245-49
; Sequence 49, Application US/08823245
; Patent No. 5776897
; GENERAL INFORMATION:
    APPLICANT: Lewis, Michael
    APPLICANT: Kauer, James C.
    APPLICANT: Smith, Kevin R.
    APPLICANT: Callison, Kathleen V.
    APPLICANT: Baldino, Frank
    APPLICANT: Neff, Nicola
APPLICANT: Iqbal, Mohamed
    TITLE OF INVENTION: TREATING DISORDERS BY
    TITLE OF INVENTION: APPLICATION
    TITLE OF INVENTION: OF INSULIN-LIKE GROWTH
    TITLE OF INVENTION: FACTORS AND
    TITLE OF INVENTION: ANALOGS
    NUMBER OF SEQUENCES: 56
    CORRESPONDENCE ADDRESS:
      ADDRESSEE: Fish & Richardson
;
       STREET: 225 Franklin Street
       CITY: Boston
       STATE: Massachusetts
       COUNTRY: U.S.A.
       ZIP: 02110-2804
     COMPUTER READABLE FORM:
      MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
;
       COMPUTER: IBM PS/2 Model 50Z or
;
       COMPUTER:
                55SX
       OPERATING SYSTEM: MS-DOS (Version 5.0)
       SOFTWARE: WordPerfect (Version
       SOFTWARE: 5.1)
     CURRENT APPLICATION DATA:
       APPLICATION NUMBER: US/08/823,245
       FILING DATE: March 24, 1997
;
       CLASSIFICATION: 514
     PRIOR APPLICATION DATA:
      APPLICATION NUMBER: 07/361,595
      FILING DATE: June 6, 1989
      APPLICATION NUMBER: 07/534,139
      FILING DATE: June 5, 1990
```

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APPLICATION NUMBER: 07/869,913
      FILING DATE: April 15, 1992
      APPLICATION NUMBER: 07/958,903
      FILING DATE: October 7, 1992
    ATTORNEY/AGENT INFORMATION:
      NAME: Creeson, Gary L.
      REGISTRATION NUMBER: 34,310
      REFERENCE/DOCKET NUMBER: 02655/003008
    TELECOMMUNICATION INFORMATION:
      TELEPHONE: (617) 542-5070
      TELEFAX: (617) 542-8906
      TELEX: 200154
  INFORMATION FOR SEQ ID NO: 49:
    SEQUENCE CHARACTERISTICS:
      LENGTH: 11
      TYPE: amino acid
      STRANDEDNESS: N/A
      TOPOLOGY: N/A
     FEATURE:
      OTHER INFORMATION: Xaa represents the D-isomer of
      OTHER INFORMATION: tyrosine.
US-08-823-245-49
                         27.3%; Score 3; DB 1; Length 11;
 Query Match
 Best Local Similarity 100.0%; Pred. No. 2.7e+03;
                                                                0; Gaps
           3; Conservative 0; Mismatches 0; Indels
                                                                            0;
           1 AKS 3
Qy
             111
           7 AKS 9
RESULT 39
US-08-667-769A-9
; Sequence 9, Application US/08667769A
; Patent No. 5783184
  GENERAL INFORMATION:
    APPLICANT: Ames, Robert S.
    APPLICANT: Appelbaum, Edward R.
    APPLICANT: Chaiken, Irwin M.
    APPLICANT: Cook, Richard M.
    APPLICANT: Gross, Mitchell S.
    APPLICANT: Holmes, Stephen D.
    APPLICANT: McMillan, Lynette J.
    APPLICANT: Theisen, Timothy \overline{W}.
    TITLE OF INVENTION: Recombinant IL5 Antagonists Useful in
    TITLE OF INVENTION: Treatment of IL5 Mediated Disorders
     NUMBER OF SEQUENCES: 76
     CORRESPONDENCE ADDRESS:
       ADDRESSEE: SmithKline Beecham Corp./Corporate
       STREET: P.O. Box 1539-UW2220
       CITY: King of Prussia
     STATE: Pennsylvania
       COUNTRY: USA
       ZIP: 19406-0939
     COMPUTER READABLE FORM:
       MEDIUM TYPE: Floppy disk
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COMPUTER: IBM PC compatible
;
      OPERATING SYSTEM: PC-DOS/MS-DOS
      SOFTWARE: PatentIn Release #1.0, Version #1.30
    CURRENT APPLICATION DATA:
      APPLICATION NUMBER: US/08/667,769A
      FILING DATE:
      CLASSIFICATION: 424
    PRIOR APPLICATION DATA:
      APPLICATION NUMBER: PCT/US95/17082
       FILING DATE: 22-DEC-1995
     PRIOR APPLICATION DATA:
      APPLICATION NUMBER: US 08/470110
      FILING DATE: 06-JUN-1995
    PRIOR APPLICATION DATA:
      APPLICATION NUMBER: US 08/467420
       FILING DATE: 06-JUN-1995
    PRIOR APPLICATION DATA:
ï
      APPLICATION NUMBER: US 08/363131
       FILING DATE: 23-DEC-1994
    ATTORNEY/AGENT INFORMATION:
;
      NAME: Sutton, Jeffrey A.
       REGISTRATION NUMBER: 34,028
       REFERENCE/DOCKET NUMBER: P50503
     TELECOMMUNICATION INFORMATION:
;
       TELEPHONE: 610-270-5024
;
       TELEFAX: 610-270-5090
   INFORMATION FOR SEQ ID NO:
     SEQUENCE CHARACTERISTICS:
;
       LENGTH: 11 amino acids
       TYPE: amino acid
       STRANDEDNESS: single
       TOPOLOGY: linear
     MOLECULE TYPE: protein
US-08-667-769A-9
                          27.3%; Score 3; DB 1; Length 11;
  Query Match
                         100.0%; Pred. No. 2.7e+03;
  Best Local Similarity
           3; Conservative 0; Mismatches 0; Indels
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  Matches
            8 SSL 10
Qу
              \mathbf{I}
            4 SSL 6
Db
RESULT 40
US-08-465-391A-280
; Sequence 280, Application US/08465391A
; Patent No. 5786331
  GENERAL INFORMATION:
     APPLICANT: Barrett, Ronald W.
     APPLICANT: Yanofsky, Stephen D.
     APPLICANT: Baldwin, David
     APPLICANT: Jacobs, Jeff W.
     APPLICANT: Bovy, Phillipe R.
     APPLICANT: Leahy, Ellen M.
     APPLICANT: Pottorf, Richard S.
     TITLE OF INVENTION: Peptides and Compounds That Bind to the
```

```
TITLE OF INVENTION: IL-1 Receptor
    NUMBER OF SEQUENCES: 405
    CORRESPONDENCE ADDRESS:
      ADDRESSEE: Townsend and Townsend and Crew
      STREET: One Market Plaza, Steuart Tower, Suite 2000
      CITY: San Francisco
      STATE: California
      COUNTRY: USA
      ZIP: 94105
    COMPUTER READABLE FORM:
      MEDIUM TYPE: Floppy disk
      COMPUTER: IBM PC compatible
      OPERATING SYSTEM: PC-DOS/MS-DOS
      SOFTWARE: PatentIn Release #1.0, Version #1.25
    CURRENT APPLICATION DATA:
      APPLICATION NUMBER: US/08/465,391A
      FILING DATE: 05-JUN-1995
;
      CLASSIFICATION: 514
    PRIOR APPLICATION DATA:
      APPLICATION NUMBER: US 08/373,474
      FILING DATE: 01-FEB-1995
      CLASSIFICATION: 514
    PRIOR APPLICATION DATA:
     APPLICATION NUMBER: US 08/190,788
      FILING DATE: 02-FEB-1994
;
      CLASSIFICATION: 514
    ATTORNEY/AGENT INFORMATION:
    NAME: No. 5786331viel, Vern
     REGISTRATION NUMBER: 32,483
     REFERENCE/DOCKET NUMBER: 16528A-001840/1019.2A
    TELECOMMUNICATION INFORMATION:
      TELEPHONE: 415-326-2400
;
      TELEFAX: 415-326-2422
;
  INFORMATION FOR SEQ ID NO: 280:
;
   SEQUENCE CHARACTERISTICS:
     LENGTH: 11 amino acids
      TYPE: amino acid
      STRANDEDNESS: single
      TOPOLOGY: linear
    MOLECULE TYPE: peptide
US-08-465-391A-280
 Query Match 27.3%; Score 3; DB 1; Length 11; Best Local Similarity 100.0%; Pred. No. 2.7e+03;
 Matches 3; Conservative 0; Mismatches 0; Indels 0; Gaps
                                                                            0;
           7 NSS 9
Qу
             111
           2 NSS 4
Db
RESULT 41
US-08-452-724A-44
; Sequence 44, Application US/08452724A
; Patent No. 5830650
; GENERAL INFORMATION:
    APPLICANT: Crea, Roberto
```

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TITLE OF INVENTION: Walk-Through Mutagenesis
    NUMBER OF SEQUENCES: 59
    CORRESPONDENCE ADDRESS:
      ADDRESSEE: Hamilton, Brook, Smith & Reynolds, P.C.
      STREET: 2 Militia Drive
      CITY: Lexington
      STATE: MA
      COUNTRY: USA
      ZIP: 02173
    COMPUTER READABLE FORM:
      MEDIUM TYPE: Floppy disk
      COMPUTER: IBM PC compatible
      OPERATING SYSTEM: PC-DOS/MS-DOS
      SOFTWARE: PatentIn Release #1.0, Version #1.30
    CURRENT APPLICATION DATA:
      APPLICATION NUMBER: US/08/452,724A
      FILING DATE: 30-MAY-1995
      CLASSIFICATION: 435
    PRIOR APPLICATION DATA:
      APPLICATION NUMBER: US 07/930,600
      FILING DATE: 05-APR-1991
    PRIOR APPLICATION DATA:
      APPLICATION NUMBER: PCT/US91/02362
;
      FILING DATE: 05-APR-1991
    PRIOR APPLICATION DATA:
;
      APPLICATION NUMBER: US 07/505,314
      FILING DATE: 05-APR-1990
    ATTORNEY/AGENT INFORMATION:
      NAME: Brook Esq., David E.
      REGISTRATION NUMBER: 22,592
      REFERENCE/DOCKET NUMBER: RC90-01AZ
    TELECOMMUNICATION INFORMATION:
      TELEPHONE: (617) 861-6240
      TELEFAX: (617) 861-9540
   INFORMATION FOR SEQ ID NO: 44:
    SEQUENCE CHARACTERISTICS:
      LENGTH: 11 amino acids
      TYPE: amino acid
      STRANDEDNESS:
      TOPOLOGY: unknown
US-08-452-724A-44
                         27.3%; Score 3; DB 2; Length 11;
  Query Match
  Best Local Similarity 100.0%; Pred. No. 2.7e+03;
          3; Conservative 0; Mismatches 0; Indels
                                                                         0;
                                                             0; Gaps
  Matches
            5 KGN 7
Qу
             111
           5 KGN 7
Db
RESULT 42
US-08-940-371-9
; Sequence 9, Application US/08940371
; Patent No. 5851525
; GENERAL INFORMATION:
     APPLICANT: Ames, Robert S.
```

```
APPLICANT: Appelbaum, Edward R.
;
    APPLICANT: Chaiken, Irwin M. APPLICANT: Cook, Richard M.
;
    APPLICANT: Gross, Mitchell S.
    APPLICANT: Holmes, Stephen D.
    APPLICANT: McMillan, Lynette J.
    APPLICANT: Theisen, Timothy W.
    TITLE OF INVENTION: Recombinant IL5 Antagonists Useful in
    TITLE OF INVENTION: Treatment of IL5 Mediated Disorders
    NUMBER OF SEQUENCES: 74
    CORRESPONDENCE ADDRESS:
      ADDRESSEE: SmithKline Beecham Corp./Corporate
      ADDRESSEE: Intellectual Property
      STREET: P. O. Box 1539-UW2220
      CITY: King of Prussia
      STATE: Pennsylvania
      COUNTRY: USA
      ZIP: 19406-0939
    COMPUTER READABLE FORM:
      MEDIUM TYPE: Floppy disk
      COMPUTER: IBM PC compatible
      OPERATING SYSTEM: PC-DOS/MS-DOS
      SOFTWARE: PatentIn Release #1.0, Version #1.25
    CURRENT APPLICATION DATA:
;
      APPLICATION NUMBER: US/08/940,371
      FILING DATE:
;
      CLASSIFICATION: 424
    PRIOR APPLICATION DATA:
      APPLICATION NUMBER: US/08/470,110
      FILING DATE:
      APPLICATION NUMBER: US 08/363131
      FILING DATE: 23-DEC-1994
    ATTORNEY/AGENT INFORMATION:
      NAME: Sutton, Jeffrey A.
      REGISTRATION NUMBER: 34,028
;
      REFERENCE/DOCKET NUMBER:
     TELECOMMUNICATION INFORMATION:
      TELEPHONE: 610 270-5024
       TELEFAX: 610 270-5090
  INFORMATION FOR SEQ ID NO: 9:
     SEQUENCE CHARACTERISTICS:
      LENGTH: 11 amino acids
       TYPE: amino acid
       STRANDEDNESS: single
       TOPOLOGY: linear
     MOLECULE TYPE: protein
US-08-940-371-9
                         27.3%; Score 3; DB 2; Length 11;
  Query Match
  Best Local Similarity 100.0%; Pred. No. 2.7e+03;
            3; Conservative 0; Mismatches 0; Indels 0; Gaps
                                                                             0;
            8 SSL 10
Qу
             111
            4 SSL 6
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RESULT 43
US-08-948-762-11
; Sequence 11, Application US/08948762
; Patent No. 5856087
  GENERAL INFORMATION:
    APPLICANT: THANAVALA, YASMIN
    APPLICANT: THAKUR, ARVIND
    APPLICANT: ROITT, IVAN APPLICANT: PRIDE, MICHAEL
    TITLE OF INVENTION: ANTI-IDIOTYPIC ANTIBODY
    TITLE OF INVENTION: HAVING CORRESPONDENCE WITH HUMAN HEPATITIS
    TITLE OF INVENTION: B SURFACE ANTIGEN
    NUMBER OF SEQUENCES: 12
    CORRESPONDENCE ADDRESS:
      ADDRESSEE: DUNN & ASSOCIATES, P.C.
      STREET: P.O. BOX 96
      CITY: NEWFANE
      STATE: NEW YORK
      COUNTRY: USA
      ZIP: 14108
    COMPUTER READABLE FORM:
      MEDIUM TYPE: DISKETTE, 3.5 INCH, 1.44 MB
      COMPUTER: VICTOR 300 SX/25
      OPERATING SYSTEM: MS-DOS VERSION 5.0
      SOFTWARE: WORDSTAR PROFESSIONAL RELEASE 4
    CURRENT APPLICATION DATA:
     APPLICATION NUMBER: US/08/948,762
      FILING DATE:
      CLASSIFICATION:
    PRIOR APPLICATION DATA:
     APPLICATION NUMBER: 08/589,011
      FILING DATE: 19-JAN-1996
      APPLICATION NUMBER: 08/167,336
      FILING DATE: 15-DEC-1993
    ATTORNEY/AGENT INFORMATION:
     NAME: DUNN, MICHAEL L.
       REGISTRATION NUMBER: 25,330
       REFERENCE/DOCKET NUMBER: RPP:138 US
     TELECOMMUNICATION INFORMATION:
       TELEPHONE: (716) 433-1661
       TELEFAX: (716) 433-1665
   INFORMATION FOR SEQ ID NO: 11:
     SEQUENCE CHARACTERISTICS:
       LENGTH: 11
       TYPE: AMINO ACID
       STRANDEDNESS: UNKNOWN
       TOPOLOGY: UNKNOWN
    MOLECULE TYPE: PEPTIDE
    HYPOTHETICAL:
    ANTI-SENSE:
     FRAGMENT TYPE:
    ORIGINAL SOURCE:
      ORGANISM:
      STRAIN:
      INDIVIDUAL ISOLATE:
      DEVELOPMENTAL STAGE:
      HAPLOTYPE:
```

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TISSUE TYPE:
;
       CELL TYPE:
;
       CELL LINE:
       ORGANELLE:
     IMMEDIATE SOURCE:
      LIBRARY:
       CLONE:
     POSITION IN GENOME:
       CHROMOSOME/SEGMENT:
      MAP POSITION:
      UNITS:
     FEATURE:
      NAME/KEY:
       LOCATION:
       IDENTIFICATION METHOD:
       OTHER INFORMATION:
     PUBLICATION INFORMATION:
;
       AUTHORS:
;
      TITLE:
       JOURNAL:
      VOLUME:
       ISSUE:
      PAGES:
      DATE:
       DOCUMENT NUMBER:
       FILING DATE:
       PUBLICATION DATE:
       RELEVANT RESIDUES IN SEQ ID NO:
US-08-948-762-11
                          27.3%; Score 3; DB 2; Length 11;
  Query Match
  Best Local Similarity 100.0%; Pred. No. 2.7e+03;
           3; Conservative 0; Mismatches
                                                                 0; Gaps
                                                                             0;
                                                 0; Indels
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            6 GNS 8
Qу
              -111
            7 GNS 9
Db
RESULT 44
US-08-539-005-38
; Sequence 38, Application US/08539005
; Patent No. 5858686
   GENERAL INFORMATION:
     APPLICANT: Schlessinger, Joseph
     APPLICANT: Skolnick, Edward Y.
     APPLICANT: Margolis, Benjamin L.
     TITLE OF INVENTION: NOVEL EXPRESSION CLONING METHOD FOR
     TITLE OF INVENTION: IDENTIFYING TARGET PROTEINS FOR EUKARYOTIC TYROSINE
     TITLE OF INVENTION: KINASES AND NOVEL TARGET PROTEINS
;
     NUMBER OF SEQUENCES: 50
;
     CORRESPONDENCE ADDRESS:
       ADDRESSEE: PENNIE & EDMONDS
       STREET: 1155 Avenue of the Americas
       CITY: New York
       STATE: New York
       COUNTRY: 10036-2711
```

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ZIP: 10036-2711
    COMPUTER READABLE FORM:
      MEDIUM TYPE: Floppy disk
      COMPUTER: IBM PC compatible
      OPERATING SYSTEM: PC-DOS/MS-DOS
      SOFTWARE: PatentIn Release #1.0, Version #1.30
    CURRENT APPLICATION DATA:
      APPLICATION NUMBER: US/08/539,005
      FILING DATE: 4-OCT-1995
      CLASSIFICATION: 435
    PRIOR APPLICATION DATA:
      APPLICATION NUMBER: US 08/167,035
      FILING DATE: 16-DEC-1993
      CLASSIFICATION: 435
    ATTORNEY/AGENT INFORMATION:
      NAME: Coruzzi, Laura A.
      REGISTRATION NUMBER: 30,742
      REFERENCE/DOCKET NUMBER: 7683-062
    TELECOMMUNICATION INFORMATION:
      TELEPHONE: (212) 790-9090
      TELEFAX: (212) 869-9741/8864
       TELEX: 66141 PENNIE
   INFORMATION FOR SEQ ID NO: 38:
     SEQUENCE CHARACTERISTICS:
      LENGTH: 11 amino acids
      TYPE: amino acid
      TOPOLOGY: unknown
    MOLECULE TYPE: peptide
US-08-539-005-38
                         27.3%; Score 3; DB 2; Length 11;
  Query Match
  Best Local Similarity 100.0%; Pred. No. 2.7e+03;
 Matches 3; Conservative 0; Mismatches
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                                                                             0;
                                                0; Indels
           7 NSS 9
Qy
             Db
            3 NSS 5
RESULT 45
US-08-464-538B-280
; Sequence 280, Application US/08464538B
; Patent No. 5861476
  GENERAL INFORMATION:
    APPLICANT: Barrett, Ronald W.
     APPLICANT: Yanofsky, Stephen D.
     APPLICANT: Baldwin, David
    APPLICANT: Jacobs, Jeff W.
    APPLICANT: Bovy, Phillipe R.
     APPLICANT: Leahy, Ellen M.
     APPLICANT: Pottorf, Richard S.
    TITLE OF INVENTION: Peptides and Compounds That Bind to the TITLE OF INVENTION: IL-1 Receptor
     NUMBER OF SEQUENCES: 402
     CORRESPONDENCE ADDRESS:
       ADDRESSEE: Townsend and Townsend and Crew LLP
       STREET: Two Embarcadero Center, 8th Floor
```

```
CITY: San Francisco
      STATE: California
      COUNTRY: USA
      ZIP: 94111
    COMPUTER READABLE FORM:
      MEDIUM TYPE: Floppy disk
      COMPUTER: IBM PC compatible
      OPERATING SYSTEM: PC-DOS/MS-DOS
      SOFTWARE: PatentIn Release #1.0, Version #1.25
    CURRENT APPLICATION DATA:
      APPLICATION NUMBER: US/08/464,538B
      FILING DATE: 05-JUN-1995
      CLASSIFICATION: 514
    PRIOR APPLICATION DATA:
      APPLICATION NUMBER: US 08/373,474
      FILING DATE: 01-FEB-1995
      CLASSIFICATION: 514
    PRIOR APPLICATION DATA:
      APPLICATION NUMBER: US 08/190,788
      FILING DATE: 02-FEB-1994
      CLASSIFICATION: 514
    ATTORNEY/AGENT INFORMATION:
      NAME: Smith, William M.
      REGISTRATION NUMBER: 30,223
      REFERENCE/DOCKET NUMBER: 16528A-001810
    TELECOMMUNICATION INFORMATION:
      TELEPHONE: 415-326-2400
      TELEFAX: 415-326-2422
  INFORMATION FOR SEQ ID NO: 280:
    SEQUENCE CHARACTERISTICS:
      LENGTH: 11 amino acids
      TYPE: amino acid
      STRANDEDNESS: single
      TOPOLOGY: linear
    MOLECULE TYPE: peptide
US-08-464-538B-280
                         27.3%; Score 3; DB 2; Length 11;
 Query Match
 Best Local Similarity 100.0%; Pred. No. 2.7e+03;
           3; Conservative 0; Mismatches 0; Indels
                                                               0; Gaps
                                                                           0;
 Matches
Qу
           7 NSS 9
             Db
           2 NSS 4
RESULT 46
US-08-540-412-120
; Sequence 120, Application US/08540412
; Patent No. 5866679
  GENERAL INFORMATION:
    APPLICANT: DeFeo-Jones, Deborah
    APPLICANT: Feng, Dong-Mei
    APPLICANT: Garsky, Victor M.
                Jones, Raymond E.
    APPLICANT:
    APPLICANT: Oliff, Allen I.
    TITLE OF INVENTION: NOVEL PEPTIDES
```

```
NUMBER OF SEQUENCES: 194
;
    CORRESPONDENCE ADDRESS:
      ADDRESSEE: DAVID A. MUTHARD
      STREET: 126 E. Lincoln Avenue, P.O. BOX 2000
      CITY: RAHWAY
      STATE: NEW JERSEY
      COUNTRY: U.S.A.
      ZIP: 07065
    COMPUTER READABLE FORM:
      MEDIUM TYPE: Floppy disk
      COMPUTER: IBM PC compatible
;
      OPERATING SYSTEM: PC-DOS/MS-DOS
      SOFTWARE: PatentIn Release #1.0, Version #1.30
    CURRENT APPLICATION DATA:
      APPLICATION NUMBER: US/08/540,412
      FILING DATE:
      CLASSIFICATION: 530
    ATTORNEY/AGENT INFORMATION:
      NAME: Muthard, David A.
;
      REGISTRATION NUMBER: 35,297
      REFERENCE/DOCKET NUMBER:
                               19253IC
    TELECOMMUNICATION INFORMATION:
      TELEPHONE: (908) 594-3903
      TELEFAX: (908) 594-4720
  INFORMATION FOR SEQ ID NO:
    SEQUENCE CHARACTERISTICS:
      LENGTH: 11 amino acids
;
      TYPE: amino acid
      STRANDEDNESS: single
      TOPOLOGY: linear
    MOLECULE TYPE: peptide
    HYPOTHETICAL: NO
    ANTI-SENSE: NO
    FRAGMENT TYPE: internal
US-08-540-412-120
                         27.3%; Score 3; DB 2; Length 11;
  Query Match
                         100.0%; Pred. No. 2.7e+03;
  Best Local Similarity
            3; Conservative 0; Mismatches 0;
                                                     Indels
                                                                    Gaps
                                                                            0;
 Matches
            8 SSL 10
Qy
              +111
Db
            9 SSL 11
RESULT 47
US-08-540-412-123
; Sequence 123, Application US/08540412
; Patent No. 5866679
  GENERAL INFORMATION:
     APPLICANT: DeFeo-Jones, Deborah
     APPLICANT: Feng, Dong-Mei
     APPLICANT: Garsky, Victor M.
    APPLICANT: Jones, Raymond E.
    APPLICANT: Oliff, Allen I.
    TITLE OF INVENTION: NOVEL PEPTIDES
    NUMBER OF SEQUENCES: 194
```

```
CORRESPONDENCE ADDRESS:
      ADDRESSEE: DAVID A. MUTHARD
;
      STREET: 126 E. Lincoln Avenue, P.O. BOX 2000
      CITY: RAHWAY
      STATE: NEW JERSEY
      COUNTRY: U.S.A.
      ZIP: 07065
    COMPUTER READABLE FORM:
      MEDIUM TYPE: Floppy disk
;
      COMPUTER: IBM PC compatible
      OPERATING SYSTEM: PC-DOS/MS-DOS
      SOFTWARE: PatentIn Release #1.0, Version #1.30
    CURRENT APPLICATION DATA:
      APPLICATION NUMBER: US/08/540,412
      FILING DATE:
      CLASSIFICATION: 530
    ATTORNEY/AGENT INFORMATION:
      NAME: Muthard, David A.
      REGISTRATION NUMBER: 35,297
      REFERENCE/DOCKET NUMBER: 19253IC
    TELECOMMUNICATION INFORMATION:
      TELEPHONE: (908) 594-3903
      TELEFAX: (908) 594-4720
   INFORMATION FOR SEQ ID NO: 123:
    SEQUENCE CHARACTERISTICS:
      LENGTH: 11 amino acids
;
      TYPE: amino acid
      STRANDEDNESS: single
      TOPOLOGY: linear
    MOLECULE TYPE: peptide
    HYPOTHETICAL: NO
    ANTI-SENSE: NO
    FRAGMENT TYPE: internal
US-08-540-412-123
                         27.3%; Score 3; DB 2; Length 11;
  Query Match
  Best Local Similarity 100.0%; Pred. No. 2.7e+03;
                                                                           0;
           3; Conservative 0; Mismatches 0; Indels 0; Gaps
 Matches
Qy
           8 SSL 10
             111
           9 SSL 11
RESULT 48
US-08-540-412-184
; Sequence 184, Application US/08540412
; Patent No. 5866679
   GENERAL INFORMATION:
    APPLICANT: DeFeo-Jones, Deborah
    APPLICANT: Feng, Dong-Mei
    APPLICANT: Garsky, Victor M.
    APPLICANT: Jones, Raymond E.
    APPLICANT: Oliff, Allen I.
    TITLE OF INVENTION: NOVEL PEPTIDES
    NUMBER OF SEQUENCES: 194
     CORRESPONDENCE ADDRESS:
```

```
ADDRESSEE: DAVID A. MUTHARD
      STREET: 126 E. Lincoln Avenue, P.O. BOX 2000
      CITY: RAHWAY
      STATE: NEW JERSEY
      COUNTRY: U.S.A.
      ZIP: 07065
    COMPUTER READABLE FORM:
      MEDIUM TYPE: Floppy disk
      COMPUTER: IBM PC compatible
      OPERATING SYSTEM: PC-DOS/MS-DOS
      SOFTWARE: PatentIn Release #1.0, Version #1.30
    CURRENT APPLICATION DATA:
     APPLICATION NUMBER: US/08/540,412
      FILING DATE:
      CLASSIFICATION: 530
    ATTORNEY/AGENT INFORMATION:
     NAME: Muthard, David A.
      REGISTRATION NUMBER: 35,297
      REFERENCE/DOCKET NUMBER: 19253IC
    TELECOMMUNICATION INFORMATION:
      TELEPHONE: (908) 594-3903
      TELEFAX: (908)594-4720
  INFORMATION FOR SEQ ID NO: 184:
    SEQUENCE CHARACTERISTICS:
      LENGTH: 11 amino acids
      TYPE: amino acid
      STRANDEDNESS: single
      TOPOLOGY: linear
    MOLECULE TYPE: peptide
US-08-540-412-184
                       27.3%; Score 3; DB 2; Length 11;
 Query Match
 Best Local Similarity 100.0%; Pred. No. 2.7e+03;
           3; Conservative 0; Mismatches 0; Indels 0; Gaps
                                                                          0;
 Matches
           8 SSL 10
Qy
             9 SSL 11
Db
RESULT 49
US-08-540-412-191
; Sequence 191, Application US/08540412
; Patent No. 5866679
  GENERAL INFORMATION:
    APPLICANT: DeFeo-Jones, Deborah
    APPLICANT: Feng, Dong-Mei
    APPLICANT: Garsky, Victor M.
    APPLICANT: Jones, Raymond E.
    APPLICANT: Oliff, Allen I.
    TITLE OF INVENTION: NOVEL PEPTIDES
    NUMBER OF SEQUENCES: 194
    CORRESPONDENCE ADDRESS:
     ADDRESSEE: DAVID A. MUTHARD
      STREET: 126 E. Lincoln Avenue, P.O. BOX 2000
      CITY: RAHWAY
      STATE: NEW JERSEY
```

```
COUNTRY: U.S.A.
      ZIP: 07065
    COMPUTER READABLE FORM:
      MEDIUM TYPE: Floppy disk
      COMPUTER: IBM PC compatible
      OPERATING SYSTEM: PC-DOS/MS-DOS
      SOFTWARE: PatentIn Release #1.0, Version #1.30
    CURRENT APPLICATION DATA:
      APPLICATION NUMBER: US/08/540,412
      FILING DATE:
      CLASSIFICATION: 530
    ATTORNEY/AGENT INFORMATION:
     NAME: Muthard, David A.
      REGISTRATION NUMBER: 35,297
      REFERENCE/DOCKET NUMBER: 19253IC
    TELECOMMUNICATION INFORMATION:
      TELEPHONE: (908) 594-3903
      TELEFAX: (908) 594-4720
  INFORMATION FOR SEQ ID NO: 191:
    SEQUENCE CHARACTERISTICS:
      LENGTH: 11 amino acids
      TYPE: amino acid
      STRANDEDNESS: single
      TOPOLOGY: linear
    MOLECULE TYPE: peptide
US-08-540-412-191
                         27.3%; Score 3; DB 2; Length 11;
 Query Match
 Best Local Similarity 100.0%; Pred. No. 2.7e+03;
 Matches 3; Conservative 0; Mismatches 0; Indels
                                                               0; Gaps
           8 SSL 10
Qγ
             111
           9 SSL 11
RESULT 50
US-08-422-092-3
; Sequence 3, Application US/08422092
; Patent No. 5869046
; GENERAL INFORMATION:
    APPLICANT: Leonard Presta
    APPLICANT: Brad Snedecor
    TITLE OF INVENTION: Altered Polypeptides with Increased
    TITLE OF INVENTION: Half-Life
    NUMBER OF SEQUENCES: 31
    CORRESPONDENCE ADDRESS:
      ADDRESSEE: Genentech, Inc.
      STREET: 460 Point San Bruno Blvd
      CITY: South San Francisco
      STATE: California
      COUNTRY: USA
      ZIP: 94080
    COMPUTER READABLE FORM:
      MEDIUM TYPE: 5.25 inch, 360 Kb floppy disk
      COMPUTER: IBM PC compatible
      OPERATING SYSTEM: PC-DOS/MS-DOS
```

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SOFTWARE: patin (Genentech)
    CURRENT APPLICATION DATA:
      APPLICATION NUMBER: US/08/422,092
       FILING DATE: 14-APR-1995
      CLASSIFICATION: 530
    PRIOR APPLICATION DATA:
      APPLICATION NUMBER:
      FILING DATE:
    ATTORNEY/AGENT INFORMATION:
      NAME: Lee, Wendy M.
       REGISTRATION NUMBER:
       REFERENCE/DOCKET NUMBER:
                                 932 - 4
    TELECOMMUNICATION INFORMATION:
      TELEPHONE: 415/225-1994
      TELEFAX: 415/952-9881
      TELEX: 910/371-7168
  INFORMATION FOR SEQ ID NO:
    SEQUENCE CHARACTERISTICS:
       LENGTH: 11 amino acids
       TYPE: amino acid
      TOPOLOGY: linear
US-08-422-092-3
  Query Match
                          27.3%; Score 3; DB 2; Length 11;
  Best Local Similarity 100.0%; Pred. No. 2.7e+03;
             3; Conservative 0; Mismatches 0; Indels
  Matches
            7 NSS 9
Qу
              \perp
            3 NSS 5
Db
RESULT 51
US-08-468-819-14
; Sequence 14, Application US/08468819
; Patent No. 5871723
  GENERAL INFORMATION:
    APPLICANT: Strieter, Robert M.
    APPLICANT: Polverini, Peter J.
    APPLICANT: Kunkel, Steven L.
    TITLE OF INVENTION: CXC Chemokines as Regulators of
     TITLE OF INVENTION: Angiogenesis
    NUMBER OF SEQUENCES: 93
     CORRESPONDENCE ADDRESS:
       ADDRESSEE: Arnold, White & Durkee
;
       STREET: P.O. Box 4433
       CITY: Houston
       STATE: TX
       COUNTRY: US
       ZIP: 77210
     COMPUTER READABLE FORM:
       MEDIUM TYPE: Floppy disk
       COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS
       SOFTWARE: PatentIn Release #1.0, Version #1.30
     CURRENT APPLICATION DATA:
       APPLICATION NUMBER: US/08/468,819
```

```
FILING DATE: Concurrently herewith
       CLASSIFICATION: 424
    ATTORNEY/AGENT INFORMATION:
      NAME: Highlander, Steven L.
      REGISTRATION NUMBER: 37,642
      REFERENCE/DOCKET NUMBER: UMIC:003/HYL
     TELECOMMUNICATION INFORMATION:
      TELEPHONE: 512/418-3000
      TELEFAX: 512/474-7477
      TELEX: N/A
   INFORMATION FOR SEQ ID NO: 14:
     SEQUENCE CHARACTERISTICS:
       LENGTH: 11 amino acids
      TYPE: amino acid
      STRANDEDNESS: single
      TOPOLOGY: linear
    MOLECULE TYPE: peptide
US-08-468-819-14
  Query Match
                         27.3%; Score 3; DB 2; Length 11;
                         100.0%; Pred. No. 2.7e+03;
  Best Local Similarity
                                                                0; Gaps
            3; Conservative 0; Mismatches 0; Indels
                                                                            0;
           4 RKG 6
Qу
            . 111
           5 RKG 7
Db
RESULT 52
US-08-559-524A-11
; Sequence 11, Application US/08559524A
; Patent No. 5871963
  GENERAL INFORMATION:
     APPLICANT: Conley, Pamela B.
     APPLICANT: Jantzen, Hans-Michael
     TITLE OF INVENTION: NOVEL PURINERGIC RECEPTOR
    NUMBER OF SEQUENCES: 14
     CORRESPONDENCE ADDRESS:
      ADDRESSEE: MORGAN, LEWIS & BOCKIUS LLP
       STREET: 1800 M Street, N.W.
      CITY: Washington
       STATE: D.C.
      COUNTRY: USA
       ZIP: 20036-5869
     COMPUTER READABLE FORM:
       MEDIUM TYPE: Floppy disk
       COMPUTER: IBM PC compatible
       OPERATING SYSTEM: PC-DOS/MS-DOS
       SOFTWARE: PatentIn Release #1.0, Version #1.30
     CURRENT APPLICATION DATA:
       APPLICATION NUMBER: US/08/559,524A
       FILING DATE: 15-NOV-1995
       CLASSIFICATION: 435
     ATTORNEY/AGENT INFORMATION:
      NAME: Adler, Reid G.
       REGISTRATION NUMBER: 30,988
       REFERENCE/DOCKET NUMBER: 044481-5010-00-US
```

```
TELECOMMUNICATION INFORMATION:
      TELEPHONE: 202-467-7000
      TELEFAX: 202-467-7176
  INFORMATION FOR SEQ ID NO: 11:
    SEQUENCE CHARACTERISTICS:
      LENGTH: 11 amino acids
      TYPE: amino acid
      STRANDEDNESS:
      TOPOLOGY: linear
    MOLECULE TYPE: peptide
US-08-559-524A-11
                         27.3%; Score 3; DB 2; Length 11;
 Query Match
 Best Local Similarity 100.0%; Pred. No. 2.7e+03;
           3; Conservative 0; Mismatches 0; Indels 0; Gaps
                                                                           0;
           7 NSS 9
Qу
             7 NSS 9
RESULT 53
US-08-637-759B-76
; Sequence 76, Application US/08637759B
; Patent No. 5876931
  GENERAL INFORMATION:
    APPLICANT: David William Holden
    TITLE OF INVENTION: Identification of Genes
    NUMBER OF SEQUENCES: 501
    CORRESPONDENCE ADDRESS:
      ADDRESSEE: Patrea L. Pabst
      STREET: 2800 One Atlantic Center
      STREET: 1201 West Peachtree Street
      CITY: Atlanta
      STATE: Georgia
      COUNTRY: USA
      ZIP: 30309-3450
    COMPUTER READABLE FORM:
      MEDIUM TYPE: Floppy disk
      COMPUTER: IBM PC compatible
      OPERATING SYSTEM: PC-DOS/MS-DOS
      SOFTWARE: PatentIn Release #1.0, Version #1.30
    CURRENT APPLICATION DATA:
      APPLICATION NUMBER: US/08/637,759B
      FILING DATE: 03-MAY-1996
      CLASSIFICATION: 435
    PRIOR APPLICATION DATA:
      APPLICATION NUMBER: PCT/GB95/02875
      FILING DATE: 11-DEC-1995
      CLASSIFICATION: 435
    ATTORNEY/AGENT INFORMATION:
      NAME: Pabst, Patrea L.
      REGISTRATION NUMBER: 31,284
      REFERENCE/DOCKET NUMBER: RPMS 101
    TELECOMMUNICATION INFORMATION:
      TELEPHONE: (404) 873-8794
      TELEFAX: (404) 873-8795
```

```
INFORMATION FOR SEQ ID NO: 76:
    SEQUENCE CHARACTERISTICS:
      LENGTH: 11 amino acids
;
      TYPE: amino acid
      STRANDEDNESS: single
      TOPOLOGY: linear
    MOLECULE TYPE: protein
    HYPOTHETICAL: NO
US-08-637-759B-76
                         27.3%; Score 3; DB 2; Length 11;
 Query Match
  Best Local Similarity 100.0%; Pred. No. 2.7e+03;
           3; Conservative 0; Mismatches 0; Indels
                                                                0; Gaps
                                                                            0;
           1 AKS 3
             -111
           6 AKS 8
Db
RESULT 54
US-08-463-076E-370
; Sequence 370, Application US/08463076E
; Patent No. 5880096
   GENERAL INFORMATION:
     APPLICANT: Barrett, Ronald W.
     APPLICANT: Yanofsky, Stephen D.
     TITLE OF INVENTION: Peptides and Compounds That Bind to the
     TITLE OF INVENTION: IL-1 Receptor
    NUMBER OF SEQUENCES: 392
     CORRESPONDENCE ADDRESS:
      ADDRESSEE: Townsend and Townsend and Crew LLP
      STREET: Two Embarcadero Center, Eighth Floor
      CITY: San Francisco
       STATE: California
      COUNTRY: USA
      ZIP: 94111-3834
     COMPUTER READABLE FORM:
      MEDIUM TYPE: Floppy disk
       COMPUTER: IBM PC compatible
       OPERATING SYSTEM: PC-DOS/MS-DOS
       SOFTWARE: PatentIn Release #1.0, Version #1.30
     CURRENT APPLICATION DATA:
       APPLICATION NUMBER: US/08/463,076E
       FILING DATE: 05-JUN-1995
      CLASSIFICATION: 514
     ATTORNEY/AGENT INFORMATION:
       NAME: Snyder, Joseph R.
       REGISTRATION NUMBER: 39,381
       REFERENCE/DOCKET NUMBER: 16528A-001850US
     TELECOMMUNICATION INFORMATION:
       TELEPHONE: (415) 576-0200
       TELEFAX: (415) 576-0300
   INFORMATION FOR SEQ ID NO: 370:
     SEQUENCE CHARACTERISTICS:
       LENGTH: 11 amino acids
       TYPE: amino acid
      STRANDEDNESS:
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TOPOLOGY: linear
   MOLECULE TYPE: peptide
US-08-463-076E-370
  Query Match
                        27.3%; Score 3; DB 2; Length 11;
  Best Local Similarity 100.0%; Pred. No. 2.7e+03;
 Matches
          3; Conservative 0; Mismatches 0; Indels
                                                                0; Gaps
                                                                            0;
           7 NSS 9
Qу
             2 NSS 4
Db
RESULT 55
US-08-788-800-8
; Sequence 8, Application US/08788800
; Patent No. 5914112
  GENERAL INFORMATION:
    APPLICANT: Bednar, Martin M. APPLICANT: Thomas, G. Roger APPLICANT: Gross, Cordell E.
    TITLE OF INVENTION: ANTI-CD18 ANTIBODIES IN STROKE
    NUMBER OF SEQUENCES: 15
    CORRESPONDENCE ADDRESS:
      ADDRESSEE: Genentech, Inc.
       STREET: 460 Point San Bruno Blvd
       CITY: South San Francisco
    STATE: California
    COUNTRY: USA
       ZIP: 94080
     COMPUTER READABLE FORM:
      MEDIUM TYPE: 3.5 inch, 1.44 Mb floppy disk
       COMPUTER: IBM PC compatible
       OPERATING SYSTEM: PC-DOS/MS-DOS
       SOFTWARE: WinPatin (Genentech)
    CURRENT APPLICATION DATA:
      APPLICATION NUMBER: US/08/788,800
       FILING DATE: 22-Jan-1997
       CLASSIFICATION: 424
    ATTORNEY/AGENT INFORMATION:
      NAME: Lee, Wendy M.
       REGISTRATION NUMBER: 40,378
       REFERENCE/DOCKET NUMBER: P0987r1
     TELECOMMUNICATION INFORMATION:
       TELEPHONE: 415/225-1994
       TELEFAX: 415/952-9881
       TELEX: 910/371-7168
   INFORMATION FOR SEQ ID NO: 8:
     SEQUENCE CHARACTERISTICS:
       LENGTH: 11 amino acids
       TYPE: Amino Acid
       TOPOLOGY: Linear
US-08-788-800-8
                        27.3%; Score 3; DB 2; Length 11;
  Query Match
  Best Local Similarity 100.0%; Pred. No. 2.7e+03;
           3; Conservative 0; Mismatches 0; Indels 0; Gaps
                                                                            0;
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7 NSS 9
Qу
             3 NSS 5
Db
RESULT 56
US-08-982-597A-6
; Sequence 6, Application US/08982597A
; Patent No. 5932693
   GENERAL INFORMATION:
    APPLICANT: Santoro, Samuel A.
    APPLICANT: Staatz, William D.
    TITLE OF INVENTION: Antithrombotic Peptides
    NUMBER OF SEQUENCES: 26
    CORRESPONDENCE ADDRESS:
      ADDRESSEE: Scott J. Meyer
      STREET: 800 No. 5932693th Lindbergh Blvd.
      CITY: St. Louis
      STATE: MO
      COUNTRY: USA
      ZIP: 63167
     COMPUTER READABLE FORM:
      MEDIUM TYPE: Floppy disk
      COMPUTER: IBM PC compatible
      OPERATING SYSTEM: PC-DOS/MS-DOS
       SOFTWARE: Word Perfect 5.0
     CURRENT APPLICATION DATA:
      APPLICATION NUMBER: US/08/982,597A
       FILING DATE:
      CLASSIFICATION: 530
     PRIOR APPLICATION DATA:
      APPLICATION NUMBER: 60/032,542
       FILING DATE: 10-DEC-1996
      CLASSIFICATION: 530
    ATTORNEY/AGENT INFORMATION:
      NAME: Meyer, Scott J.
       REGISTRATION NUMBER: 25,275
       REFERENCE/DOCKET NUMBER: WU-3002
     TELECOMMUNICATION INFORMATION:
       TELEPHONE: 314-694-3117
   INFORMATION FOR SEQ ID NO:
     SEOUENCE CHARACTERISTICS:
       LENGTH: 11 amino acids
      TYPE: amino acid
      TOPOLOGY: linear
     MOLECULE TYPE: peptide
US-08-982-597A-6
  Query Match
                         27.3%; Score 3; DB 2; Length 11;
  Best Local Similarity
                        100.0%; Pred. No. 2.7e+03;
            3; Conservative 0; Mismatches
                                                  0; Indels
                                                                0; Gaps
                                                                            0;
  Matches
            6 GNS 8
Qу
             - 111
            9 GNS 11
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Db

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RESULT 57
US-08-747-137-63
; Sequence 63, Application US/08747137
; Patent No. 5945033
  GENERAL INFORMATION:
    APPLICANT: YEN, Richard C.K.
     TITLE OF INVENTION: NON-CROSSLINKED PROTEIN PARTICLES FOR
     TITLE OF INVENTION: THERAPEUTIC AND DIAGNOSTIC USE
    NUMBER OF SEQUENCES: 184
     CORRESPONDENCE ADDRESS:
      ADDRESSEE: Townsend and Townsend and Crew LLP
      STREET: Two Embarcadero Center, 8th Floor
      CITY: San Francisco
       STATE: CA
       COUNTRY: USA
       ZIP: 94111
    COMPUTER READABLE FORM:
      MEDIUM TYPE: Floppy disk
       COMPUTER: IBM PC compatible
      OPERATING SYSTEM: PC-DOS/MS-DOS
       SOFTWARE: PatentIn Release #1.0, Version #1.30
     CURRENT APPLICATION DATA:
      APPLICATION NUMBER: US/08/747,137
      FILING DATE: 12-NOV-1996
       CLASSIFICATION: 424
     PRIOR APPLICATION DATA:
      APPLICATION NUMBER: US 08/212,546
       FILING DATE: 14-MAR-1994
     PRIOR APPLICATION DATA:
      APPLICATION NUMBER: US 08/069,831
       FILING DATE: 01-JUN-1993
     PRIOR APPLICATION DATA:
      APPLICATION NUMBER: US 07/959,560
      FILING DATE: 13-OCT-1992
     PRIOR APPLICATION DATA:
      APPLICATION NUMBER: US 07/641,720
       FILING DATE: 15-JAN-1991
    ATTORNEY/AGENT INFORMATION:
      NAME: Apple, Randolph T.
       REGISTRATION NUMBER: 36,429
       REFERENCE/DOCKET NUMBER: 016197-000840US
     TELECOMMUNICATION INFORMATION:
       TELEPHONE: 415-576-0200
   INFORMATION FOR SEQ ID NO: 63:
     SEQUENCE CHARACTERISTICS:
      LENGTH: 11 amino acids
       TYPE: amino acid
       STRANDEDNESS: not relevant
      TOPOLOGY: not relevant
US-08-747-137-63
                         27.3%; Score 3; DB 2; Length 11;
  Query Match
                         100.0%; Pred. No. 2.7e+03;
  Best Local Similarity
  Matches 3; Conservative 0; Mismatches 0; Indels
                                                                0; Gaps
                                                                            0;
```

```
RESULT 58
US-08-989-667-9
; Sequence 9, Application US/08989667
 Patent No. 5948662
  GENERAL INFORMATION:
     APPLICANT: KOBAYASHI, KATSUNORI
    APPLICANT:
                YAMANAKA, SHIGERU
    APPLICANT: MIWA, KIYOSHI
    APPLICANT: SUZUKI, SHUNICHI
    APPLICANT:
                ETO, YUZURU
                TANITA, YUKO
    APPLICANT:
                YOKOZEKI, KENZO
    APPLICANT:
     APPLICANT: HASHIGUCHI, KENICHI
    TITLE OF INVENTION: BACILLUS-DERIVED TRANSGLUTAMINASE
    NUMBER OF SEQUENCES: 9
     CORRESPONDENCE ADDRESS:
      ADDRESSEE: OBLON, SPIVAK, MCCLELLEAND, MAIER & NEUSTADT,
      ADDRESSEE: P.C.
       STREET: 1755 S. JEFFERSON DAVIS HIGHWAY, SUITE 400
       CITY: ARLINGTON
       STATE: VA
       COUNTRY: USA
       ZIP: 22202
     COMPUTER READABLE FORM:
      MEDIUM TYPE: Floppy disk
       COMPUTER: IBM PC compatible
       OPERATING SYSTEM: PC-DOS/MS-DOS
       SOFTWARE: PatentIn Release #1.0, Version #1.30
    CURRENT APPLICATION DATA:
      APPLICATION NUMBER: US/08/989,667
       FILING DATE:
       CLASSIFICATION:
     PRIOR APPLICATION DATA:
      APPLICATION NUMBER: US 08/596,864
       FILING DATE: 09-FEB-1996
       APPLICATION NUMBER: JP 021963/1995
       FILING DATE: 09-FEB-1995
     PRIOR APPLICATION DATA:
       APPLICATION NUMBER: JP 226316/1995
       FILING DATE: 04-SEP-1995
     PRIOR APPLICATION DATA:
       APPLICATION NUMBER: JP 013072/1996
       FILING DATE: 29-JAN-1996
     ATTORNEY/AGENT INFORMATION:
       NAME: OBLON, NORMAN F.
       REGISTRATION NUMBER: 24,618
       REFERENCE/DOCKET NUMBER: 10-786-0
     TELECOMMUNICATION INFORMATION:
       TELEPHONE: 703-413-3000
       TELEFAX: 703-413-2220
   INFORMATION FOR SEQ ID NO:
     SEQUENCE CHARACTERISTICS:
       LENGTH: 11 amino acids
```

```
STRANDEDNESS: single
      TOPOLOGY: linear
    MOLECULE TYPE: peptide
US-08-989-667-9
                         27.3%; Score 3; DB 2; Length 11;
 Ouery Match
 Best Local Similarity 100.0%; Pred. No. 2.7e+03;
           3; Conservative 0; Mismatches 0; Indels 0; Gaps
                                                                           0;
 Matches
           7 NSS 9
Qу
             \pm 1.1 \pm
           6 NSS 8
Db
RESULT 59
US-09-121-527-4
; Sequence 4, Application US/09121527
; Patent No. 5958775
; GENERAL INFORMATION:
; APPLICANT: WICKSTROM, ERIC
; APPLICANT: CLEAVER, STEPHEN
  TITLE OF INVENTION: COMPOSITION AND METHOD FOR TARGETED INTEGRATION INTO
  TITLE OF INVENTION: CELLS
 FILE REFERENCE: JEFF-0251
  CURRENT APPLICATION NUMBER: US/09/121,527
  CURRENT FILING DATE: 1998-07-23
  EARLIER APPLICATION NUMBER: 60/054,146
  EARLIER FILING DATE: 1997-07-25
; NUMBER OF SEQ ID NOS: 4
; SOFTWARE: PatentIn Ver. 2.0
; SEO ID NO 4
   LENGTH: 11
   TYPE: PRT
   ORGANISM: Homo sapiens
US-09-121-527-4
                         27.3%; Score 3; DB 2; Length 11;
  Query Match
  Best Local Similarity 100.0%; Pred. No. 2.7e+03;
  Matches 3; Conservative 0; Mismatches 0; Indels 0; Gaps
                                                                           0;
           1 AKS 3
Qу
             \pm 111
Db
           5 AKS 7
RESULT 60
US-08-350-260A-485
; Sequence 485, Application US/08350260A
; Patent No. 5962255
  GENERAL INFORMATION:
    APPLICANT: Winter, Gregory Paul
    APPLICANT: Griffiths, Andrew David
    APPLICANT: Williams, Samuel Cameron
    APPLICANT: Waterhouse, Peter
    APPLICANT: Nissim, Ahuva
    APPLICANT: Johnson, Kevin Stuart
```

TYPE: amino acid

```
APPLICANT: Smith, Andrew John Hammond
    TITLE OF INVENTION: Methods for producing members of specific
     TITLE OF INVENTION: binding pairs
    NUMBER OF SEQUENCES: 602
    CORRESPONDENCE ADDRESS:
      ADDRESSEE: David W. Clough
       STREET: Marshall, O'Toole, Gerstein, Murray & Borun
       STREET: 6300 Sears Tower, 233 South Wacker Drive
       CITY: Chicago
      STATE: Illinois
      COUNTRY: USA
       ZIP: 60606-6402
    COMPUTER READABLE FORM:
      MEDIUM TYPE: Floppy disk
       COMPUTER: IBM PC compatible
       OPERATING SYSTEM: PC-DOS/MS-DOS
       SOFTWARE: PatentIn Release #1.0, Version #1.25 (EPO)
    CURRENT APPLICATION DATA:
      APPLICATION NUMBER: US/08/350,260A
       FILING DATE: 05-DEC-1994
       CLASSIFICATION: 435
    PRIOR APPLICATION DATA:
      APPLICATION NUMBER: GB 9110549.4
       FILING DATE: 15-MAY-1991
    PRIOR APPLICATION DATA:
       APPLICATION NUMBER: GB 9206318.9
       FILING DATE: 24-MAR-1992
     PRIOR APPLICATION DATA:
       APPLICATION NUMBER: PCT/GB91/01134
       FILING DATE: 10-JUL-1991
     PRIOR APPLICATION DATA:
      APPLICATION NUMBER: PCT/GB92/00883
       FILING DATE: 15-MAY-1992
    PRIOR APPLICATION DATA:
      APPLICATION NUMBER: PCT/GB93/00605
      FILING DATE: 24-MAR-1993
    PRIOR APPLICATION DATA:
      APPLICATION NUMBER: US 08/150,002
      FILING DATE: 31-MAR-1994
    PRIOR APPLICATION DATA:
      APPLICATION NUMBER: US 08/307,619
       FILING DATE: 16-SEP-1994
    ATTORNEY/AGENT INFORMATION:
      NAME: Clough, David W
      REGISTRATION NUMBER: 36,107
      REFERENCE/DOCKET NUMBER: 28111/32372
    TELECOMMUNICATION INFORMATION:
      TELEPHONE: 312-474-6300
   INFORMATION FOR SEQ ID NO:
    SEQUENCE CHARACTERISTICS:
       LENGTH: 11 amino acids
       TYPE: amino acid
       STRANDEDNESS: single
      TOPOLOGY: linear
US-08-350-260A-485
```

```
Best Local Similarity 100.0%; Pred. No. 2.7e+03;
           3; Conservative 0; Mismatches 0; Indels
                                                              0; Gaps
           3 SRK 5
Qy
             111
           5 SRK 7
Db
RESULT 61
US-08-827-009-1
; Sequence 1, Application US/08827009
; Patent No. 5968511
  GENERAL INFORMATION:
    APPLICANT: Akita, Robert
    APPLICANT: Sliwkowski, Mark
    TITLE OF INVENTION: ErbB3 Antibodies
    NUMBER OF SEQUENCES: 5
    CORRESPONDENCE ADDRESS:
      ADDRESSEE: Genentech, Inc.
      STREET: 1 DNA Way
      CITY: South San Francisco
      STATE: California
      COUNTRY: USA
      ZIP: 94080
    COMPUTER READABLE FORM:
      MEDIUM TYPE: 3.5 inch, 1.44 Mb floppy disk
      COMPUTER: IBM PC compatible
      OPERATING SYSTEM: PC-DOS/MS-DOS
      SOFTWARE: WinPatin (Genentech)
    CURRENT APPLICATION DATA:
      APPLICATION NUMBER: US/08/827,009
      FILING DATE:
      CLASSIFICATION: 424
    PRIOR APPLICATION DATA:
      APPLICATION NUMBER: 60/046850
      FILING DATE: 27-MAR-1996
    ATTORNEY/AGENT INFORMATION:
      NAME: Lee, Wendy M.
      REGISTRATION NUMBER: 40,378
      REFERENCE/DOCKET NUMBER: P1003R1
    TELECOMMUNICATION INFORMATION:
      TELEPHONE: 650/225-1994
      TELEFAX: 650/952-9881
   INFORMATION FOR SEQ ID NO: 1:
    SEQUENCE CHARACTERISTICS:
      LENGTH: 11 amino acids
      TYPE: Amino Acid
      TOPOLOGY: Linear
US-08-827-009-1
                         27.3%; Score 3; DB 2; Length 11;
  Query Match
  Best Local Similarity 100.0%; Pred. No. 2.7e+03;
           3; Conservative 0; Mismatches 0; Indels
                                                               0; Gaps
                                                                           0;
 Matches
           7 NSS 9
Qу
             +
           3 NSS 5
Db
```

```
RESULT 62
US-08-343-443B-68
; Sequence 68, Application US/08343443B
 Patent No. 5968734
   GENERAL INFORMATION:
     APPLICANT: Aurias, Alain
    APPLICANT: Delattre, Olivier
    APPLICANT: Desmaze, Chantal
    APPLICANT: Melot, Thomas
    APPLICANT: Peter, Martine
    APPLICANT: Ploougastel, Beatrice
                Thomas, Gilles
    APPLICANT:
    APPLICANT: Zucman, Jessica
     TITLE OF INVENTION: NUCLEIC ACID CORRESPONDING TO A GENE OF
                        CHROMOSOME 22 INVOLVED IN RECURRENT CHROMOSOMAL
     TITLE OF INVENTION:
     TITLE OF INVENTION: TRANSLATIONS ASSOCIATED WITH THE DEVELOPMENT OF
CANCEROUS
                         TUMORS, AND NUCLEIC ACIDS OF FUSION RESULTING FROM
     TITLE OF INVENTION:
SAID
                         TRANSLOCATIONS
     TITLE OF INVENTION:
    NUMBER OF SEQUENCES: 129
     CORRESPONDENCE ADDRESS:
       ADDRESSEE: Weiser & Associates
       STREET: 230 South Fifteenth Street
       CITY: Philadelphia
       STATE: PA
       COUNTRY: USA
       ZIP: 19102
     COMPUTER READABLE FORM:
       MEDIUM TYPE: Floppy disk
       COMPUTER: IBM PC compatible
       OPERATING SYSTEM: PC-DOS/MS-DOS
       SOFTWARE: AEDIT 1.0 DOS text editor
     CURRENT APPLICATION DATA:
       APPLICATION NUMBER: US/08/343,443B
       FILING DATE: 18-NOV-1994
       CLASSIFICATION: 514
     PRIOR APPLICATION DATA:
       APPLICATION NUMBER: PCT/FR93/00494
       FILING DATE: 19-MAY-1993
     PRIOR APPLICATION DATA:
       APPLICATION NUMBER: FR 92/06123
       FILING DATE: 20-MAY-1992
     ATTORNEY/AGENT INFORMATION:
       NAME: Weiser, Gerard J.
       REGISTRATION NUMBER: 19,763
       REFERENCE/DOCKET NUMBER: 989.6121P
     TELECOMMUNICATION INFORMATION:
       TELEPHONE: 215-875-8383
       TELEFAX: 215-875-8394
   INFORMATION FOR SEQ ID NO:
     SEQUENCE CHARACTERISTICS:
       LENGTH: 11 amino acids
       TYPE: amino acid
       TOPOLOGY: linear
```

```
MOLECULE TYPE: protein
US-08-343-443B-68
                         27.3%; Score 3; DB 2; Length 11;
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 Best Local Similarity 100.0%; Pred. No. 2.7e+03;
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                                                               0; Gaps
 Matches
           3; Conservative
Qу
           8 SSL 10
             -111
           6 SSL 8
Db
RESULT 63
US-08-466-860-3
; Sequence 3, Application US/08466860
; Patent No. 5985552
; GENERAL INFORMATION:
    APPLICANT: HOWELL, MARK D.
    APPLICANT: BROSTOFF, STEVEN W.
    APPLICANT: CARLO, DENNIS J.
    TITLE OF INVENTION: VACCINATION AND METHODS AGAINST DISEASES
    TITLE OF INVENTION: RESULTING FROM PATHOGENIC RESPONSES BY SPECIFIC T CELL
    TITLE OF INVENTION: POPULATIONS
    NUMBER OF SEQUENCES: 75
    CORRESPONDENCE ADDRESS:
      ADDRESSEE: CAMPBELL AND FLORES
      STREET: 4370 LA JOLLA VILLAGE DRIVE, SUITE 700
      CITY: SAN DIEGO
       STATE: CALIFORNIA
      COUNTRY: UNITED STATES
       ZIP: 92122
     COMPUTER READABLE FORM:
       MEDIUM TYPE: Floppy disk
       COMPUTER: IBM PC compatible
       OPERATING SYSTEM: PC-DOS/MS-DOS
       SOFTWARE: PatentIn Release #1.0, Version #1.25
     CURRENT APPLICATION DATA:
       APPLICATION NUMBER: US/08/466,860
       FILING DATE:
       CLASSIFICATION: 424
     PRIOR APPLICATION DATA:
       APPLICATION NUMBER: US 07/813,867
       FILING DATE: 24-DEC-1991
     ATTORNEY/AGENT INFORMATION:
       NAME: CAMPBELL, CATHRYN
       REGISTRATION NUMBER: 31,815
       REFERENCE/DOCKET NUMBER: P-IM 9107
     TELECOMMUNICATION INFORMATION:
       TELEPHONE: 619-535-9001
       TELEFAX: 619-535-8949
   INFORMATION FOR SEQ ID NO:
     SEQUENCE CHARACTERISTICS:
       LENGTH: 11 amino acids
       TYPE: amino acid
       TOPOLOGY: linear
     MOLECULE TYPE: peptide
     FRAGMENT TYPE: N-terminal
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27.3%; Score 3; DB 2; Length 11;
  Query Match
  Best Local Similarity 100.0%; Pred. No. 2.7e+03;
            3; Conservative 0; Mismatches
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                                                                0; Gaps
           8 SSL 10
Qу
             +111
           2 SSL 4
Db
RESULT 64
US-08-466-860-6
; Sequence 6, Application US/08466860
; Patent No. 5985552
  GENERAL INFORMATION:
    APPLICANT: HOWELL, MARK D.
    APPLICANT: BROSTOFF, STEVEN W.
    APPLICANT: CARLO, DENNIS J.
    TITLE OF INVENTION: VACCINATION AND METHODS AGAINST DISEASES
    TITLE OF INVENTION: RESULTING FROM PATHOGENIC RESPONSES BY SPECIFIC T CELL
    TITLE OF INVENTION: POPULATIONS
    NUMBER OF SEQUENCES: 75
    CORRESPONDENCE ADDRESS:
      ADDRESSEE: CAMPBELL AND FLORES
      STREET: 4370 LA JOLLA VILLAGE DRIVE, SUITE 700
      CITY: SAN DIEGO
     STATE: CALIFORNIA
       COUNTRY: UNITED STATES
       ZIP: 92122
    COMPUTER READABLE FORM:
      MEDIUM TYPE: Floppy disk
       COMPUTER: IBM PC compatible
       OPERATING SYSTEM: PC-DOS/MS-DOS
       SOFTWARE: PatentIn Release #1.0, Version #1.25
    CURRENT APPLICATION DATA:
      APPLICATION NUMBER: US/08/466,860
       FILING DATE:
       CLASSIFICATION: 424
     PRIOR APPLICATION DATA:
      APPLICATION NUMBER: US 07/813,867
       FILING DATE: 24-DEC-1991
    ATTORNEY/AGENT INFORMATION:
      NAME: CAMPBELL, CATHRYN
      REGISTRATION NUMBER: 31,815
       REFERENCE/DOCKET NUMBER: P-IM 9107
    TELECOMMUNICATION INFORMATION:
       TELEPHONE: 619-535-9001
       TELEFAX: 619-535-8949
   INFORMATION FOR SEQ ID NO:
    SEQUENCE CHARACTERISTICS:
       LENGTH: 11 amino acids
       TYPE: amino acid
       TOPOLOGY: linear
     MOLECULE TYPE: peptide
     FRAGMENT TYPE: N-terminal
US-08-466-860-6
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27.3%; Score 3; DB 2; Length 11;
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Qу
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           2 SSL 4
RESULT 65
US-08-871-355A-76
; Sequence 76, Application US/08871355A
; Patent No. 6015669
  GENERAL INFORMATION:
    APPLICANT: David William Holden
    TITLE OF INVENTION: Identification of Genes
    NUMBER OF SEQUENCES: 501
    CORRESPONDENCE ADDRESS:
      ADDRESSEE: Patrea L. Pabst
      STREET: 2800 One Atlantic Center
      STREET: 1201 West Peachtree Street
      CITY: Atlanta
      STATE: Georgia
      COUNTRY: USA
      ZIP: 30309-3450
    COMPUTER READABLE FORM:
      MEDIUM TYPE: Floppy disk
      COMPUTER: IBM PC compatible
      OPERATING SYSTEM: PC-DOS/MS-DOS
      SOFTWARE: PatentIn Release #1.0, Version #1.30
    CURRENT APPLICATION DATA:
      APPLICATION NUMBER: US/08/871,355A
       FILING DATE: 09-JUN-1997
       CLASSIFICATION: 435
     PRIOR APPLICATION DATA:
      APPLICATION NUMBER: PCT/GB95/02875
       FILING DATE: 11-DEC-1995
       CLASSIFICATION: 435
    ATTORNEY/AGENT INFORMATION:
       NAME: Pabst, Patrea L.
       REGISTRATION NUMBER: 31,284
       REFERENCE/DOCKET NUMBER: RPMS 101 CON
     TELECOMMUNICATION INFORMATION:
       TELEPHONE: (404) 873-8794
       TELEFAX: (404) 873-8795
   INFORMATION FOR SEQ ID NO: 76:
     SEQUENCE CHARACTERISTICS:
       LENGTH: 11 amino acids
       TYPE: amino acid
       STRANDEDNESS: single
       TOPOLOGY: linear
     MOLECULE TYPE: protein
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US-08-871-355A-76
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Qу
             111
           6 AKS 8
Db
RESULT 66
US-08-904-446A-6
; Sequence 6, Application US/08904446A
; Patent No. 6029114
   GENERAL INFORMATION:
     APPLICANT: Shamovsky, Igor L.
     APPLICANT: Ross, Gregory M.
     APPLICANT: Riopelle, Richard J.
     APPLICANT: Weaver, Donald F.
    TITLE OF INVENTION: Molecular Modelling of Neurotrophin-Receptor
     TITLE OF INVENTION: Binding
    NUMBER OF SEQUENCES: 17
     CORRESPONDENCE ADDRESS:
       ADDRESSEE: Dowell & Dowell, P.C.
       STREET: 1215 Jefferson Davis Highway, Suite 309
       CITY: Arlington
       STATE: Virginia
;
       COUNTRY: United States of America
;
       ZIP: 22202
     COMPUTER READABLE FORM:
       MEDIUM TYPE: Floppy disk
       COMPUTER: IBM PC compatible
       OPERATING SYSTEM: PC-DOS/MS-DOS
       SOFTWARE: PatentIn Release #1.0, Version #1.30 (EPO)
     CURRENT APPLICATION DATA:
       APPLICATION NUMBER: US/08/904,446A
       FILING DATE: 31-JUL-1997
     PRIOR APPLICATION DATA:
       APPLICATION NUMBER: GB 9616105.4
       FILING DATE: 31-JUL-1996
     ATTORNEY/AGENT INFORMATION:
       NAME: RALPH A. DOWELL
       REGISTRATION NUMBER: 26868
     TELECOMMUNICATION INFORMATION:
       TELEPHONE: (703) 415-2555
       TELEFAX: (703) 415-2559
   INFORMATION FOR SEQ ID NO: 6:
     SEQUENCE CHARACTERISTICS:
       LENGTH: 11 amino acids
       TYPE: amino acid
       STRANDEDNESS: single
       TOPOLOGY: linear
     MOLECULE TYPE: peptide
     FEATURE:
       NAME/KEY: Peptide
       LOCATION:
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       OTHER INFORMATION: /note= "C-terminal residues 108-118
       OTHER INFORMATION: of human NGF"
US-08-904-446A-6
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 Matches
           3; Conservative
            3 SRK 5
Qу
              111
            6 SRK 8
RESULT 67
US-08-904-446A-7
; Sequence 7, Application US/08904446A
; Patent No. 6029114
   GENERAL INFORMATION:
    APPLICANT: Shamovsky, Igor L. APPLICANT: Ross, Gregory M.
;
    APPLICANT: Riopelle, Richard J.
     APPLICANT: Weaver, Donald F.
     TITLE OF INVENTION: Molecular Modelling of Neurotrophin-Receptor
     TITLE OF INVENTION: Binding
    NUMBER OF SEQUENCES: 17
     CORRESPONDENCE ADDRESS:
;
       ADDRESSEE: Dowell & Dowell, P.C.
;
       STREET: 1215 Jefferson Davis Highway, Suite 309
;
       CITY: Arlington
       STATE: Virginia
       COUNTRY: United States of America
       ZIP: 22202
     COMPUTER READABLE FORM:
       MEDIUM TYPE: Floppy disk
       COMPUTER: IBM PC compatible
;
       OPERATING SYSTEM: PC-DOS/MS-DOS
       SOFTWARE: PatentIn Release #1.0, Version #1.30 (EPO)
     CURRENT APPLICATION DATA:
       APPLICATION NUMBER: US/08/904,446A
       FILING DATE: 31-JUL-1997
     PRIOR APPLICATION DATA:
       APPLICATION NUMBER: GB 9616105.4
       FILING DATE: 31-JUL-1996
     ATTORNEY/AGENT INFORMATION:
       NAME: RALPH A. DOWELL
;
       REGISTRATION NUMBER: 26868
;
     TELECOMMUNICATION INFORMATION:
       TELEPHONE: (703) 415-2555
       TELEFAX: (703) 415-2559
   INFORMATION FOR SEQ ID NO: 7:
     SEQUENCE CHARACTERISTICS:
;
       LENGTH: 11 amino acids
;
       TYPE: amino acid
;
       STRANDEDNESS: single
       TOPOLOGY: linear
     MOLECULE TYPE: peptide
     FEATURE:
                Peptide
       NAME/KEY:
       LOCATION:
                  1..11
       OTHER INFORMATION: /note= "C-terminal residues 108-118
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OTHER INFORMATION: of mouse NGF"
US-08-904-446A-7
                         27.3%; Score 3; DB 3; Length 11;
 Query Match
 Best Local Similarity 100.0%; Pred. No. 2.7e+03;
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                                                               0; Gaps
           3; Conservative
                               0; Mismatches 0; Indels
 Matches
           3 SRK 5
Qу
             \pm 11
           6 SRK 8
Dh
RESULT 68
US-08-159-339A-1131
; Sequence 1131, Application US/08159339A
; Patent No. 6037135
  GENERAL INFORMATION:
    APPLICANT: Kubo, Ralph T.
    APPLICANT: Grey, Howard M.
    APPLICANT: Sette, Alessandro
    APPLICANT: Celis, Esteban
    TITLE OF INVENTION: HLA Binding peptides and Their
    TITLE OF INVENTION: Uses
    NUMBER OF SEQUENCES: 1254
    CORRESPONDENCE ADDRESS:
      ADDRESSEE: Townsend and Townsend and Crew LLP
      STREET: Two Embarcadero Center, Eighth Floor
      CITY: San Francisco
      STATE: CA
      COUNTRY: USA
      ZIP: 94111-3834
    COMPUTER READABLE FORM:
      MEDIUM TYPE: Diskette
      COMPUTER: IBM Compatible
      OPERATING SYSTEM: DOS
       SOFTWARE: FastSEQ for Windows Version 2.0
    CURRENT APPLICATION DATA:
      APPLICATION NUMBER: US/08/159,339A
      FILING DATE: 29-NOV-1993
      CLASSIFICATION: 424
     PRIOR APPLICATION DATA:
      APPLICATION NUMBER: US 07/926,666
       FILING DATE: 07-AUG-1992
      APPLICATION NUMBER: US 08/027,746
      FILING DATE: 05-MAR-1993
       APPLICATION NUMBER: US 08/103,396
       FILING DATE: 06-AUG-1993
    ATTORNEY/AGENT INFORMATION:
       NAME: Weber, Ellen Lauver
       REGISTRATION NUMBER: 32,762
       REFERENCE/DOCKET NUMBER: 018623-005030US
    TELECOMMUNICATION INFORMATION:
       TELEPHONE: (415) 576-0200
       TELEFAX: (415) 576-0300
       TELEX:
   INFORMATION FOR SEQ ID NO: 1131:
     SEQUENCE CHARACTERISTICS:
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LENGTH: 11 amino acids
      TYPE: amino acid
      STRANDEDNESS: single
      TOPOLOGY: linear
    MOLECULE TYPE: peptide
US-08-159-339A-1131
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 Query Match
 Best Local Similarity 100.0%; Pred. No. 2.7e+03;
 Matches 3; Conservative 0; Mismatches 0; Indels 0; Gaps
                                                                           0;
           3 SRK 5
Qv
             +111
           9 SRK 11
Db
RESULT 69
US-08-974-899-16
; Sequence 16, Application US/08974899
; Patent No. 6037454
  GENERAL INFORMATION:
    APPLICANT: Presta, Leonard G.
    APPLICANT: Jardieu, Paula M.
;
    TITLE OF INVENTION: Humanized Anti-CD11a Antibodies
    NUMBER OF SEQUENCES: 24
    CORRESPONDENCE ADDRESS:
      ADDRESSEE: Genentech, Inc.
       STREET: 1 DNA Way
      CITY: South San Francisco
       STATE: California
       COUNTRY: USA
      ZIP: 94080
    COMPUTER READABLE FORM:
      MEDIUM TYPE: 3.5 inch, 1.44 Mb floppy disk
      COMPUTER: IBM PC compatible
       OPERATING SYSTEM: PC-DOS/MS-DOS
       SOFTWARE: WinPatin (Genentech)
    CURRENT APPLICATION DATA:
      APPLICATION NUMBER: US/08/974,899
       FILING DATE:
       CLASSIFICATION: 536
    PRIOR APPLICATION DATA:
     APPLICATION NUMBER: 60/031971
       FILING DATE: 11/27/96
    ATTORNEY/AGENT INFORMATION:
      NAME: Lee, Wendy M.
       REGISTRATION NUMBER: 40,378
      REFERENCE/DOCKET NUMBER: P1014R1
     TELECOMMUNICATION INFORMATION:
       TELEPHONE: 650/225-1994
       TELEFAX: 650/952-9881
   INFORMATION FOR SEQ ID NO: 16:
     SEQUENCE CHARACTERISTICS:
       LENGTH: 11 amino acids
       TYPE: Amino Acid
       TOPOLOGY: Linear
US-08-974-899-16
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27.3%; Score 3; DB 3; Length 11;
 Query Match
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                                                                          0;
 Matches
           7 NSS 9
Qу
             -111
           3 NSS 5
RESULT 70
US-08-749-707-11
; Sequence 11, Application US/08749707
; Patent No. 6063582
  GENERAL INFORMATION:
    APPLICANT: Conley, Pamela B.
    APPLICANT: Jantzen, Hans-Michael
    TITLE OF INVENTION: NOVEL PURINERGIC RECEPTOR
    NUMBER OF SEQUENCES: 14
    CORRESPONDENCE ADDRESS:
      ADDRESSEE: MORGAN, LEWIS & BOCKIUS LLP
      STREET: 1800 M Street, N.W.
      CITY: Washington
      STATE: D.C.
      COUNTRY: USA
      ZIP: 20036-5869
    COMPUTER READABLE FORM:
      MEDIUM TYPE: Floppy disk
      COMPUTER: IBM PC compatible
      OPERATING SYSTEM: PC-DOS/MS-DOS
;
       SOFTWARE: PatentIn Release #1.0, Version #1.30
    CURRENT APPLICATION DATA:
      APPLICATION NUMBER: US/08/749,707
       FILING DATE: 15-NOV-1996
;
      CLASSIFICATION: 536
    ATTORNEY/AGENT INFORMATION:
      NAME: Adler, Reid G.
       REGISTRATION NUMBER: 30,988
       REFERENCE/DOCKET NUMBER: 044481-5010-01-US
     TELECOMMUNICATION INFORMATION:
       TELEPHONE: 202-467-7000
       TELEFAX: 202-467-7176
   INFORMATION FOR SEQ ID NO: 11:
     SEQUENCE CHARACTERISTICS:
       LENGTH: 11 amino acids
       TYPE: amino acid
       STRANDEDNESS:
       TOPOLOGY: linear
    MOLECULE TYPE: peptide
US-08-749-707-11
                         27.3%; Score 3; DB 3; Length 11;
  Query Match
  Best Local Similarity 100.0%; Pred. No. 2.7e+03;
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111

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RESULT 71
US-09-136-218-6
; Sequence 6, Application US/09136218
; Patent No. 6083914
  GENERAL INFORMATION:
    APPLICANT: Santoro, Samuel A.
    APPLICANT: Staatz, William D.
    TITLE OF INVENTION: Antithrombotic Peptides
    NUMBER OF SEQUENCES: 26
    CORRESPONDENCE ADDRESS:
      ADDRESSEE: Scott J. Meyer
       STREET: 800 No. 6083914th Lindbergh Blvd.
      CITY: St. Louis
;
       STATE: MO
      COUNTRY: USA
       ZIP: 63167
     COMPUTER READABLE FORM:
      MEDIUM TYPE: Floppy disk
       COMPUTER: IBM PC compatible
      OPERATING SYSTEM: PC-DOS/MS-DOS
       SOFTWARE: Word Perfect 5.0
     CURRENT APPLICATION DATA:
      APPLICATION NUMBER: US/09/136,218
       FILING DATE:
       CLASSIFICATION:
     PRIOR APPLICATION DATA:
      APPLICATION NUMBER: US/08/982,597
       FILING DATE:
       APPLICATION NUMBER: 60/032,542
       FILING DATE: 10-DEC-1996
    ATTORNEY/AGENT INFORMATION:
       NAME: Meyer, Scott J.
       REGISTRATION NUMBER: 25,275
       REFERENCE/DOCKET NUMBER: WU-3002
     TELECOMMUNICATION INFORMATION:
       TELEPHONE: 314-694-3117
   INFORMATION FOR SEQ ID NO:
     SEQUENCE CHARACTERISTICS:
       LENGTH: 11 amino acids
       TYPE: amino acid
       TOPOLOGY: linear
     MOLECULE TYPE: peptide
US-09-136-218-6
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Qу
              III
            9 GNS 11
Db
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US-08-472-040A-3
; Sequence 3, Application US/08472040A
; Patent No. 6090387
  GENERAL INFORMATION:
    APPLICANT: HOWELL, MARK D.
    APPLICANT: BROSTOFF, STEVEN W.
;
    APPLICANT: CARLO, DENNIS J.
;
    TITLE OF INVENTION: VACCINATION AND METHODS AGAINST DISEASES
    TITLE OF INVENTION: RESULTING FROM PATHOGENIC RESPONSES BY SPECIFIC T CELL
    TITLE OF INVENTION: POPULATIONS
    NUMBER OF SEQUENCES: 77
    CORRESPONDENCE ADDRESS:
      ADDRESSEE: CAMPBELL & FLORES LLP
      STREET: 4370 LA JOLLA VILLAGE DRIVE, SUITE 700
;
      CITY: SAN DIEGO
       STATE: CALIFORNIA
      COUNTRY: UNITED STATES
       ZIP: 92122
     COMPUTER READABLE FORM:
      MEDIUM TYPE: Floppy disk
       COMPUTER: IBM PC compatible
      OPERATING SYSTEM: PC-DOS/MS-DOS
       SOFTWARE: PatentIn Release #1.0, Version #1.25
    CURRENT APPLICATION DATA:
      APPLICATION NUMBER: US/08/472,040A
      FILING DATE: 06-JUN-1995
      CLASSIFICATION: 424
     ATTORNEY/AGENT INFORMATION:
      NAME: CAMPBELL, CATHRYN
       REGISTRATION NUMBER: 31,815
       REFERENCE/DOCKET NUMBER: P-IM 1641
     TELECOMMUNICATION INFORMATION:
       TELEPHONE: 619-535-9001
       TELEFAX: 619-535-8949
   INFORMATION FOR SEQ ID NO:
     SEQUENCE CHARACTERISTICS:
       LENGTH: 11 amino acids
       TYPE: amino acid
       TOPOLOGY: linear
     MOLECULE TYPE: peptide
     FRAGMENT TYPE: N-terminal
US-08-472-040A-3
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                                                               0; Gaps
                                                                            0;
            3; Conservative
                                                0; Indels
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Qу
              +111
            2 SSL 4
Db
RESULT 73
US-08-472-040A-6
; Sequence 6, Application US/08472040A
; Patent No. 6090387
; GENERAL INFORMATION:
```

```
APPLICANT: HOWELL, MARK D.
    APPLICANT: BROSTOFF, STEVEN W.
    APPLICANT: CARLO, DENNIS J.
    TITLE OF INVENTION: VACCINATION AND METHODS AGAINST DISEASES
    TITLE OF INVENTION: RESULTING FROM PATHOGENIC RESPONSES BY SPECIFIC T CELL
    TITLE OF INVENTION: POPULATIONS
    NUMBER OF SEQUENCES: 77
    CORRESPONDENCE ADDRESS:
      ADDRESSEE: CAMPBELL & FLORES LLP
      STREET: 4370 LA JOLLA VILLAGE DRIVE, SUITE 700
      CITY: SAN DIEGO
      STATE: CALIFORNIA
      COUNTRY: UNITED STATES
      ZIP: 92122
;
    COMPUTER READABLE FORM:
;
      MEDIUM TYPE: Floppy disk
;
      COMPUTER: IBM PC compatible
      OPERATING SYSTEM: PC-DOS/MS-DOS
      SOFTWARE: PatentIn Release #1.0, Version #1.25
    CURRENT APPLICATION DATA:
      APPLICATION NUMBER: US/08/472,040A
      FILING DATE: 06-JUN-1995
      CLASSIFICATION: 424
    ATTORNEY/AGENT INFORMATION:
     NAME: CAMPBELL, CATHRYN
      REGISTRATION NUMBER: 31,815
      REFERENCE/DOCKET NUMBER: P-IM 1641
    TELECOMMUNICATION INFORMATION:
      TELEPHONE: 619-535-9001
      TELEFAX: 619-535-8949
   INFORMATION FOR SEQ ID NO: 6:
    SEQUENCE CHARACTERISTICS:
      LENGTH: 11 amino acids
      TYPE: amino acid
      TOPOLOGY: linear
    MOLECULE TYPE: peptide
     FRAGMENT TYPE: N-terminal
US-08-472-040A-6
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  Query Match
  Best Local Similarity 100.0%; Pred. No. 2.7e+03;
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Qу
             2 SSL 4
Db
RESULT 74
US-08-817-177-4
; Sequence 4, Application US/08817177
; Patent No. 6096314
; GENERAL INFORMATION:
     APPLICANT: COHEN, Irun R.
     APPLICANT: ELIAS, Dana
     TITLE OF INVENTION: PEPTIDES AND PHARMACEUTICAL COMPOSITIONS
     TITLE OF INVENTION: COMPRISING THEM
```

```
NUMBER OF SEQUENCES: 16
;
    CORRESPONDENCE ADDRESS:
      ADDRESSEE: Browdy and Neimark, P.L.L.C.
      STREET: 419 Seventh Street, N. W.
      CITY: Washington
      COUNTRY: US
      ZIP: 20004
    COMPUTER READABLE FORM:
      MEDIUM TYPE: Floppy disk
      COMPUTER: IBM PC compatible
      OPERATING SYSTEM: PC-DOS/MS-DOS
      SOFTWARE: PatentIn Release #1.0, Version #1.25
    CURRENT APPLICATION DATA:
      APPLICATION NUMBER: US/08/817,177
      FILING DATE:
      CLASSIFICATION: 530
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    PRIOR APPLICATION DATA:
      APPLICATION NUMBER: PCT/US95/12686
      FILING DATE: 10-OCTOBER-1995
     PRIOR APPLICATION DATA:
;
      APPLICATION NUMBER: ISRAEL APP. NO. 111,196
      FILING DATE: 07-OCTOBER-1994
    ATTORNEY/AGENT INFORMATION:
      NAME: BROWDY, Roger L.
;
      REGISTRATION NUMBER: 25,618
      REFERENCE/DOCKET NUMBER: COHEN=27
    TELECOMMUNICATION INFORMATION:
      TELEPHONE: (202) 628-5197
      TELEFAX: (202) 737-3528
  INFORMATION FOR SEQ ID NO: 4:
     SEQUENCE CHARACTERISTICS:
      LENGTH: 11 amino acids
      TYPE: amino acid
      STRANDEDNESS: single
      TOPOLOGY: linear
     MOLECULE TYPE: peptide
US-08-817-177-4
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Qу
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RESULT 75
US-08-491-954-93
; Sequence 93, Application US/08491954
; Patent No. 6096321
   GENERAL INFORMATION:
     APPLICANT: Girardeau, Jean-Pierre
     APPLICANT: Martin, Christine
     APPLICANT: Mechin, Marie-Claire
     APPLICANT:
                Der Vartanian, Maurice
     APPLICANT: Bousquet, Francois
```

```
TITLE OF INVENTION: SUB-UNIT OF CS31A PROTEIN CAPSULE
    TITLE OF INVENTION: MODIFIED BY AT LEAST ONE HETEROLOGOUS PEPTIDE, CS31A
    TITLE OF INVENTION: PROTEIN CAPSULE INCLUDING SUCH A SUB-UNIT, AND
    TITLE OF INVENTION: MICROORGANISMS WHOSE OUTER MEMBRANE CARRIES SUCH
    TITLE OF INVENTION: SUB-UNITS, AND PROCEDURE FOR OBTAINING AND UTILIZING
SUCH
    TITLE OF INVENTION: SUB-UNITS
;
    NUMBER OF SEQUENCES: 115
    CORRESPONDENCE ADDRESS:
      ADDRESSEE: WEISER & ASSOCIATES
      STREET: 230 South Fifteenth Street, Suite 500
      CITY: Philadelphia
      STATE: PA
      COUNTRY: USA
      ZIP: 19102
    COMPUTER READABLE FORM:
      MEDIUM TYPE: Floppy disk
      COMPUTER: IBM PC compatible
      OPERATING SYSTEM: PC-DOS/MS-DOS
      SOFTWARE: PatentIn Release #1.0, Version #1.30
    CURRENT APPLICATION DATA:
      APPLICATION NUMBER: US/08/491,954
      FILING DATE: 16-FEB-1996
      CLASSIFICATION: 424
   PRIOR APPLICATION DATA:
      APPLICATION NUMBER: PCT/FR93/01281
      FILING DATE: 21-DEC-1993
    ATTORNEY/AGENT INFORMATION:
      NAME: Weiser, Gerard J.
      REGISTRATION NUMBER: 19,763
     REFERENCE/DOCKET NUMBER: 989.6264P
    TELECOMMUNICATION INFORMATION:
      TELEPHONE: 215-875-8383
      TELEFAX: 215-875-8394
   INFORMATION FOR SEQ ID NO:
    SEQUENCE CHARACTERISTICS:
      LENGTH: 11 amino acids
      TYPE: amino acid
      TOPOLOGY: linear
    MOLECULE TYPE: protein
US-08-491-954-93
                         27.3%; Score 3; DB 3; Length 11;
  Query Match
  Best Local Similarity 100.0%; Pred. No. 2.7e+03;
           3; Conservative 0; Mismatches 0; Indels 0; Gaps
            7 NSS 9
Qу
             \perp
            1 NSS 3
Ďb
Search completed: April 8, 2004, 15:52:16
```

Job time : 12.3077 secs

## GenCore version 5.1.6 Copyright (c) 1993 - 2004 Compugen Ltd.

OM protein - protein search, using sw model

Run on: April 8, 2004, 15:30:07; Search time 8.61538 Seconds

(without alignments)

122.816 Million cell updates/sec

Title: US-09-787-443A-21

Perfect score: 11

Sequence: 1 AKSRKGNSSLM 11

Scoring table: OLIGO

Gapop 60.0 , Gapext 60.0

Searched: 283366 seqs, 96191526 residues

Word size:

Total number of hits satisfying chosen parameters: 226

Minimum DB seq length: 11 Maximum DB seq length: 11

Post-processing: Listing first 100 summaries

Database: PIR\_78:\*

1: pir1:\*

2: pir2:\*

3: pir3:\*

4: pir4:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

## SUMMARIES

Result No.	Score	<pre>% Query Match</pre>	Length	DB	ID <b></b>	Description
1	3	27.3	11	2	S66606	quinoline 2-oxidor
2	3	27.3	11	2	н54346	pyruvate synthase
. 3	3	27.3	11	2	G61497	seed protein ws-23
4	2	18.2	11	1	ECLQ2M	tachykinin II - mi
5	2	18.2	11	1	SPHO	substance P - hors
6	2	18.2	11	1	EOOCC	eledoisin - curled
7	2	18.2	11	1	A60654	substance P - guin
8	2	18.2	11	1	EOOC	eledoisin - musky
9	2	18.2	11	2	A33917	dihydroorotase (EC
10	2	18.2	11	2	JN0023	substance P - chic
11	2	18.2	11	2	A40693	transgelin - sheep
12	2	18.2	11	2	A38841	rhodopsin homolog
13	2	18.2	11	2	S09074	cytochrome P450-4b

		,					
1.4	2	10 0	11	2	D60409		kassinin-like pept
14	2 2	18.2 18.2	11 11	2 2	F60409		substance P-like p
15 16	2	18.2	11	2	E60409		substance P-like p
17	2	18.2	11	2	B26744		megascoliakinin -
18	2	18.2	11	2	S23308		substance P - rain
19	2	18.2	11	2	S23306		substance P - Atla
20	2	18.2	11	2	B60409		kassinin-like pept
21	2	18.2	11	2	C60409		kassinin-like pept
22	2	18.2	11	2	S07203		uperolein - frog (
23	2	18.2	11	2	S07201		physalaemin - frog
24	2	18.2	$\frac{-}{11}$	2	A61033		ranatachykinin A -
25	2	18.2	11	2	B43669		hypothetical prote
26	2	18.2	11	2	PC2372		58K heat shock pro
27	2	18.2	11	2	S19775		wound-induced prot
28	2	18.2	11	2	s71304		amine oxidase (cop
29	2	18.2	11	2	A34135		DNA-binding protei
30	2	18.2	11	2	A26120		6-phosphofructokin
31	2	18.2	11	2	A35594		buccalin - Califor
32	2	18.2	11	2	s69349		neuropeptide FFami
33 .	2	18.2	11	2	S05002		corazonin - Americ
34	2	18.2	11	2	\$33300		probable substance
35	2	18.2	11	2	S43626		cytochrome-c oxida
36	2	18.2	11	2	D42965		talin - chicken (f
37	2	18.2	11	2	165231		CCK-B gastrin rece
38	2	18.2	11	2 2	E57789 I52980		gallbladder stone glucocerebrosidase
39	2 2	18.2 18.2	11 11	2	PT0273		Ig heavy chain CRD
40 41	2	18.2	11	2	PT0302		Ig heavy chain CRD
42	2	18.2	11	2	S13279		Ile-Ser-bradykinin
43	2	18.2	11	2	I54193		Rhesus blood group
44	2	18.2	11	2	S68649		spermadhesin AQN-3
45	2	18.2	11	2	S68637		acetylcholinestera
46	2	18.2	$\frac{1}{1}$	2	A33571		follistatin - bovi
47	2	18.2	11	2	S23926		major glycoprotein
48	2	18.2	11	2	A14454		6-phosphofructokin
49	2	18.2	11	2	A29806		acidic proline-ric
50	2	18.2	11	2	PH1375		T antigen variant
51	2	18.2	11	2	PH1376		T antigen variant
52	2	18.2	11	2	PT0217		T-cell receptor be
53	2	18.2	11	2	PT0218		T-cell receptor be
54	2	18.2	11	2	D41946		T-cell receptor ga
55	2	18.2	11	2	B41946		T-cell receptor ga
.56	2	18.2	11	2	C38887		T-cell receptor ga
57	2	18.2	11	2	I41946		T-cell receptor ga
58	2	18.2	11	2	PD0441		translation elonga 68kDa neurofilamen
59	2	18.2	11	2	I60434 S65377		cytochrome-c oxida
60	2 2	18.2 18.2	11 11	2	PH0939		T-cell receptor be
61 62	2	18.2	11	2	PH0939		T-cell receptor be
63	2	18.2	11	2	PH0941		T-cell receptor be
64	2	18.2	11	2	PH0929		T-cell receptor be
65	2	18.2	11	2	PH0891		T-cell receptor be
66	2	18.2	11	2	PH0938		T-cell receptor be
67	2	18.2	11	2	PH0947		T-cell receptor be
68	2	18.2	11	2	PH0903		T-cell receptor be
69	2	18.2	11	2	PH0904		T-cell receptor be
70	2	18.2	11	2	PH0924		T-cell receptor be
	_						. <del>-</del>

71	2	18.2	11	2	PH0919	T-cell receptor be
72	2	18.2	11	2	PH0914	T-cell receptor be
73	2	18.2	11	2	PH0922	T-cell receptor be
74	2	18.2	11	2	РН0906	T-cell receptor be
75	2	18.2	11	2	A34243	H-hyosophorin - Ja
76	2	18.2	11	2	s60294	tubulin 2 beta-3 c
77	2	18.2	11	4	I52708	ELAV-like neuronal
78	2	18.2	11	4	S19015	hypothetical prote
79	1	9.1	11	1	XAVIBH	bradykinin-potenti
80	1	9.1	11	1	XASNBA	bradykinin-potenti
81	1	9.1	11	1	GMROL	leucosulfakinin -
82	1	9.1	11	1	LFTWWE	probable trpEG lea
83	1	9.1	11	2	S66196	alcohol dehydrogen
84	1	9.1	11	2	G42762	proteasome endopep
85	1	9.1	11	2	S68392	H+-transporting tw
86	1	9.1	11	2	B49164	chromogranin-B - r
87	1	9.1	11	2	s32575	ribosomal protein
88	1	9.1	11	2	PQ0682	photosystem I 17.5
89	1	9.1	11	2	S00616	parasporal crystal
90	1	9.1	11	2	C53652	rhlR protein - Pse
91	1	9.1	11	2	A57458	gene Gax protein -
92	1	9.1	11	2	A26930	ermG leader peptid
93	1	9.1	11	2	YHRT	morphogenetic neur
94	1	9.1	11	2	YHHU	morphogenetic neur
95	1	9.1	11	2	YHBO	morphogenetic neur
96	1	9.1	11	2	YHXAE	morphogenetic neur
97	1	9.1	11	2	YHJFHY	morphogenetic neur
98	1	9.1	11	2	A61365	phyllokinin - Rohd
99	1	9.1	11	2	S07207	Crinia-angiotensin
100	1	9.1	11	2	D61033	ranatachykinin D -

## ALIGNMENTS

```
RESULT 1
S66606
quinoline 2-oxidoreductase alpha chain - Comamonas testosteroni (fragment)
C; Species: Comamonas téstosteroni
C;Date: 15-Feb-1997 #sequence_revision 13-Mar-1997 #text_change 17-Mar-1999
C; Accession: S66606
R; Schach, S.; Tshisuaka, B.; Fetzner, S.; Lingens, F.
Eur. J. Biochem. 232, 536-544, 1995
A; Title: Quinoline 2-oxidoreductase and 2-oxo-1, 2-dihydroquinoline 5,6-
dioxygenase from Comamonas testosteroni 63. The first two enzymes in quinoline
and 3-methylquinoline degradation.
A; Reference number: S66606; MUID: 96035889; PMID: 7556204
A; Accession: S66606
A; Molecule type: protein
A; Residues: 1-11 <SCH>
A; Experimental source: strain 63
                          27.3%; Score 3; DB 2; Length 11;
  Query Match
                          100.0%; Pred. No. 2.6e+03;
  Best Local Similarity
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  Matches
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```
|||
1 AKS 3
```

Db

```
RESULT 2
H54346
pyruvate synthase (EC 1.2.7.1) alpha chain - Pyrococcus furiosus (fragment)
C; Species: Pyrococcus furiosus
C;Date: 05-Jan-1996 #sequence revision 05-Jan-1996 #text change 05-May-2000
C; Accession: H54346
R;Blamey, J.M.; Adams, M.W.
Biochemistry 33, 1000-1007, 1994
A; Title: Characterization of an ancestral type of pyruvate ferredoxin
oxidoreductase from the hyperthermophilic bacterium, Thermotoga maritima.
A; Reference number: A54346; MUID: 94137707; PMID: 8305426
A; Accession: H54346
A; Status: preliminary
A; Molecule type: protein
A; Residues: 1-11 <BLA>
C; Keywords: coenzyme A; oxidoreductase
                          27.3%; Score 3; DB 2; Length 11;
  Query Match
  Best Local Similarity 100.0%; Pred. No. 2.6e+03;
             3; Conservative
                                 0; Mismatches
                                                    0; Indels
                                                                       Gaps
                                                                               0;
  Matches
            5 KGN 7
Qγ
              111
            4 KGN 6
RESULT 3
G61497
seed protein ws-23 - winged bean (fragment)
C; Species: Psophocarpus tetragonolobus (winged bean)
C;Date: 07-Oct-1994 #sequence revision 07-Oct-1994 #text change 07-Oct-1994
C: Accession: G61497
R; Hirano, H.
J. Protein Chem. 8, 115-130, 1989
A; Title: Microsequence analysis of winged bean seed proteins electroblotted from
two-dimensional gel.
A; Reference number: A61491; MUID: 89351606; PMID: 2765119
A; Accession: G61497
A; Status: preliminary
A; Molecule type: protein
A; Residues: 1-11 <HIR>
C; Keywords: glycoprotein; seed
                           27.3%; Score 3; DB 2; Length 11;
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  Best Local Similarity
                                                        Indels
                                                                               0;
             3; Conservative
                                  0; Mismatches
                                                    0;
  Matches
            1 AKS 3
Qy
              \mathbf{I}
            1 AKS 3
Db
```

```
ECLQ2M
tachykinin II - migratory locust
C; Species: Locusta migratoria (migratory locust)
C;Date: 31-Dec-1991 #sequence revision 31-Dec-1991 #text change 08-Dec-1995
C:Accession: S08266
R; Schoofs, L.; Holman, G.M.; Hayes, T.K.; Nachman, R.J.; de Loof, A.
FEBS Lett. 261, 397-401, 1990
A; Title: Locustatachykinin I and II, two novel insect neuropeptides with
homology to peptides of the vertebrate tachykinin family.
A: Reference number: S08265; MUID: 90184489; PMID: 2311766
A; Accession: S08266
A; Molecule type: protein
A; Residues: 1-11 <SCH>
C; Superfamily: tachykinin
C; Keywords: amidated carboxyl end; neuropeptide; tachykinin
F;11/Modified site: amidated carboxyl end (Arg) #status experimental
                          18.2%; Score 2; DB 1; Length 11;
  Query Match
                          100.0%; Pred. No. 3e+04;
  Best Local Similarity
                                                                              0;
                               0; Mismatches
                                                   0; Indels
                                                                  0; Gaps
            2; Conservative
  Matches
            8 SS 9
Qу
             11
            4 ss 5
Db
RESULT 5
SPHO
substance P - horse
C; Species: Equus caballus (domestic horse)
C;Date: 23-Oct-1981 #sequence_revision 23-Oct-1981 #text_change 23-Aug-1996
C:Accession: A01558
R; Studer, R.O.; Trzeciak, A.; Lergier, W.
Helv. Chim. Acta 56, 860-866, 1973
A; Title: Isolierung und Aminosaeuresequenz von Substanz P aus Pferdedarm.
A; Reference number: A01558
A; Accession: A01558
A; Molecule type: protein
A; Residues: 1-11 <STU>
C; Superfamily: substance P precursor
C; Keywords: amidated carboxyl end; hormone
F;11/Modified site: amidated carboxyl end (Met) #status experimental
                          18.2%; Score 2; DB 1; Length 11;
  Query Match
                          100.0%; Pred. No. 3e+04;
  Best Local Similarity
                                                                              0;
                                                                  0; Gaps
             2; Conservative
                                 0; Mismatches 0; Indels
  Matches
           10 LM 11
Qу
              11
           10 LM 11
Db
RESULT 6
EOOCC
eledoisin - curled octopus
C; Species: Eledone cirrosa, Ozaena cirrosa (curled octopus)
C;Date: 31-Dec-1991 #sequence revision 31-Dec-1991 #text change 20-Mar-1998
```

```
C: Accession: B01561; A01561
R; Anastasi, A.; Erspamer, V.
Arch. Biochem. Biophys. 101, 56-65, 1963
A; Title: The isolation and amino acid sequence of eledoisin, the active
endecapeptide of the posterior salivary glands of Eledone.
A; Reference number: A01561
A; Accession: B01561
A; Molecule type: protein
A; Residues: 1-11 <ANA>
C; Superfamily: substance P precursor
C; Keywords: amidated carboxyl end; hormone; pyroglutamic acid; salivary gland;
secretagoque; vasodilator; venom
F;1/Modified site: pyrrolidone carboxylic acid (Gln) #status experimental
F;11/Modified site: amidated carboxyl end (Met) #status experimental
                                  Score 2; DB 1; Length 11;
  Query Match
                          18.2%;
  Best Local Similarity
                          100.0%; Pred. No. 3e+04;
             2; Conservative
                                0; Mismatches
                                                   0; Indels
                                                                  0; Gaps
                                                                               0;
           10 LM 11
Qу
              11
           10 LM 11
Db
RESULT 7
A60654
substance P - guinea pig
C; Species: Cavia porcellus (guinea pig)
C;Date: 14-May-1993 #sequence revision 27-Jun-1994 #text_change 08-Dec-1995
C; Accession: A60654
R; Murphy, R.
Neuropeptides 14, 105-110, 1989
A; Title: Primary amino acid sequence of guinea-pig substance P.
A; Reference number: A60654; MUID: 90044685; PMID: 2478925
A; Accession: A60654
A; Molecule type: protein
A; Residues: 1-11 <MUR>
C; Superfamily: substance P precursor
C; Keywords: amidated carboxyl end; neuropeptide; tachykinin
F;11/Modified site: amidated carboxyl end (Met) #status experimental
  Query Match
                          18.2%; Score 2; DB 1; Length 11;
                          100.0%; Pred. No. 3e+04;
  Best Local Similarity
                                                                      Gaps
                                                                               0;
                                 0; Mismatches
                                                    0; Indels
                                                                  0;
  Matches
             2; Conservative
           10 LM 11
QУ
              | | |
           10 LM 11
Db
RESULT 8
EOOC
eledoisin - musky octopus
C; Species: Eledone moschata, Ozaena moschata (musky octopus)
C;Date: 13-Jul-1981 #sequence_revision 13-Jul-1981 #text_change 20-Mar-1998
C; Accession: A01561
R; Anastasi, A.; Erspamer, V.
```

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Arch. Biochem. Biophys. 101, 56-65, 1963
A; Title: The isolation and amino acid sequence of eledoisin, the active
endecapeptide of the posterior salivary glands of Eledone.
A: Reference number: A01561
A: Accession: A01561
A; Molecule type: protein
A; Residues: 1-11 <ANA>
C; Superfamily: substance P precursor
C; Keywords: amidated carboxyl end; hormone; pyroglutamic acid; salivary gland;
secretagogue; vasodilator; venom
F:1/Modified site: pyrrolidone carboxylic acid (Gln) #status experimental
F;11/Modified site: amidated carboxyl end (Met) #status experimental
                          18.2%; Score 2; DB 1; Length 11;
  Query Match
                          100.0%; Pred. No. 3e+04;
  Best Local Similarity
             2; Conservative
                                                        Indels
                                                                  0; Gaps
                                                                              0:
                                 0; Mismatches
                                                    0;
  Matches
           10 LM 11
QУ
              11
           10 LM 11
Db
RESULT 9
A33917
dihydroorotase (EC 3.5.2.3) - Chinese hamster (fragment)
C; Species: Cricetulus griseus (Chinese hamster)
C;Date: 09-Mar-1990 #sequence revision 09-Mar-1990 #text change 07-Nov-1997
C; Accession: A33917
R; Simmer, J.P.; Kelly, R.E.; Scully, J.L.; Grayson, D.R.; Rinker Jr., A.G.;
Bergh, S.T.; Evans, D.R.
Proc. Natl. Acad. Sci. U.S.A. 86, 4382-4386, 1989
A; Title: Mammalian aspartate transcarbamylase (ATCase): sequence of the ATCase
domain and interdomain linker in the CAD multifunctional polypeptide and
properties of the isolated domain.
A; Reference number: A33917; MUID: 89282776; PMID: 2543974
A; Accession: A33917
A; Status: preliminary
A; Molecule type: mRNA
A; Residues: 1-11 <SIM>
A; Cross-references: GB:M23652
C; Superfamily: rudimentary enzyme; aspartate/ornithine carbamoyltransferase
homology; Bacillus dihydroorotase homology; biotin carboxylase homology;
carbamoyl-phosphate synthase (ammonia) homology; carbamoyl-phosphate synthase
(glutamine-hydrolyzing) large chain homology; carbamoyl-phosphate synthase
(glutamine-hydrolyzing) small chain homology; trpG homology
C; Keywords: hydrolase
                           18.2%; Score 2; DB 2; Length 11;
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                                                        Indels
                                                                      Gaps
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             2; Conservative
                                                    0;
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            5 KG 6
Qy
              11
            7 KG 8
Db
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JN0023
substance P - chicken
C; Species: Gallus gallus (chicken)
C;Date: 07-Sep-1990 #sequence revision 07-Sep-1990 #text change 11-Jul-1997
C; Accession: JN0023
R; Conlon, J.M.; Katsoulis, S.; Schmidt, W.E.; Thim, L.
Regul. Pept. 20, 171-180, 1988
A; Title: [Arg3] substance P and neurokinin A from chicken small intestine.
A; Reference number: JN0023; MUID: 88204263; PMID: 2452461
A; Accession: JN0023
A; Molecule type: protein
A; Residues: 1-11 <CON>
C; Superfamily: substance P precursor
C; Keywords: amidated carboxyl end; tachykinin
F;11/Modified site: amidated carboxyl end (Met) #status predicted
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                               0; Mismatches
                                                                  0; Gaps
  Matches
             2; Conservative
           10 LM 11
Qу
              10 LM 11
Db
RESULT 11
A40693
transgelin - sheep (fragment)
C; Species: Ovis orientalis aries, Ovis ammon aries (domestic sheep)
C;Date: 03-May-1994 #sequence revision 03-May-1994 #text change 31-Oct-1997
C; Accession: A40693
R; Shapland, C.; Hsuan, J.J.; Totty, N.F.; Lawson, D.
J. Cell Biol. 121, 1065-1073, 1993
A; Title: Purification and properties of transgelin: a transformation and shape
change sensitive actin-gelling protein.
A; Reference number: A40693; MUID: 93273790; PMID: 8501116
A:Accession: A40693
A; Molecule type: protein
A; Residues: 1-11 <SHA>
A; Experimental source: aorta
C; Comment: This protein gels actin and is down regulated by transformation or
loss of cell adherence in culture.
C; Superfamily: smooth muscle protein SM22; calponin repeat homology; smooth
muscle protein SM22 homology
C; Keywords: actin binding; cytoskeleton
                          18.2%; Score 2; DB 2; Length 11;
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                          100.0%; Pred. No. 3e+04;
  Best Local Similarity
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            5 KG 6
Qy
              11
            1 KG 2
Db
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RESULT 12 A38841

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rhodopsin homolog - squid (Watasenia scintillans) (fragment)
N; Alternate names: visual pigment protein
C; Species: Watasenia scintillans (sparkling enope)
C; Date: 17-Jul-1992 #sequence revision 17-Jul-1992 #text change 31-Oct-1997
C; Accession: A38841
R; Seidou, M.; Kubota, I.; Hiraki, K.; Kito, Y.
Biochim. Biophys. Acta 957, 318-321, 1988
A; Title: Amino acid sequence of the retinal binding site of squid visual
A; Reference number: PT0063; MUID:89051045; PMID:3191148
A; Accession: A38841
A; Molecule type: protein
A; Residues: 1-11 <SEI>
C; Superfamily: vertebrate rhodopsin
C; Keywords: chromoprotein; retinal
F;3/Binding site: retinal (Lys) (covalent) #status experimental
                          18.2%; Score 2; DB 2; Length 11;
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                          100.0%; Pred. No. 3e+04;
                                                                              0;
                                0; Mismatches
                                                   0; Indels
                                                                  0; Gaps
             2; Conservative
  Matches
            1 AK 2
Qy
              2 AK 3
Db
RESULT 13
S09074
cytochrome P450-4b - rat (fragment)
N; Alternate names: cytochrome P450K-5
N; Contains: oxidoreductase (EC 1.-.-.)
C; Species: Rattus norvegicus (Norway rat)
C; Date: 23-Apr-1993 #sequence revision 23-Apr-1993 #text change 05-Mar-1999
C; Accession: S09074
R; Imaoka, S.; Terano, Y.; Funae, Y.
Arch. Biochem. Biophys. 278, 168-178, 1990
A; Title: Changes in the amount of cytochrome P450s in rat hepatic microsomes
with starvation.
A; Reference number: S09072; MUID: 90210577; PMID: 2321956
A; Accession: S09074
A; Molecule type: protein
A; Residues: 1-11 <IMA>
C; Superfamily: unassigned cytochrome P450; cytochrome P450 homology
C; Keywords: heme; microsome; monooxygenase; oxidoreductase; transmembrane
protein
                          18.2%; Score 2; DB 2; Length 11;
  Query Match
                          100.0%; Pred. No. 3e+04;
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                                                                  0; Gaps
                               0; Mismatches
                                                    0; Indels
                                                                               0;
             2; Conservative
  Matches
            9 SL 10
Qу
              11
            7 SL 8
Db
```

RESULT 14 D60409

```
kassinin-like peptide K-III - frog (Pseudophryne guentheri)
C; Species: Pseudophryne guentheri
C; Date: 30-Jan-1993 #sequence revision 30-Jan-1993 #text change 02-Sep-2000
C; Accession: D60409
R; Simmaco, M.; Severini, C.; De Biase, D.; Barra, D.; Bossa, F.; Roberts, J.D.;
Melchiorri, P.; Erspamer, V.
Peptides 11, 299-304, 1990
A; Title: Six novel tachykinin- and bombesin-related peptides from the skin of
the Australian frog Pseudophryne guentheri.
A; Reference number: A60409; MUID: 90287814; PMID: 2356157
A; Accession: D60409
A; Molecule type: protein
A; Residues: 1-11 <SIM>
C; Superfamily: unassigned animal peptides
C; Keywords: amidated carboxyl end; pyroglutamic acid
F; 1/Modified site: pyrrolidone carboxylic acid (Gln) #status experimental
F;11/Modified site: amidated carboxyl end (Met) #status experimental
                          18.2%; Score 2; DB 2; Length 11;
  Query Match
                          100.0%; Pred. No. 3e+04;
  Best Local Similarity
                                                                               0;
                                0; Mismatches
                                                    0; Indels
                                                                  0; Gaps
             2; Conservative
  Matches
           10 LM 11
Qу
              \perp
           10 LM 11
Db
RESULT 15
F60409
substance P-like peptide II - frog (Pseudophryne guentheri)
C; Species: Pseudophryne guentheri
C;Date: 30-Jan-1993 #sequence revision 30-Jan-1993 #text change 02-Sep-2000
C; Accession: F60409
R; Simmaco, M.; Severini, C.; De Biase, D.; Barra, D.; Bossa, F.; Roberts, J.D.;
Melchiorri, P.; Erspamer, V.
Peptides 11, 299-304, 1990
A; Title: Six novel tachykinin- and bombesin-related peptides from the skin of
the Australian frog Pseudophryne guentheri.
A; Reference number: A60409; MUID: 90287814; PMID: 2356157
A; Accession: F60409
A; Molecule type: protein
A; Residues: 1-11 <SIM>
C; Superfamily: unassigned animal peptides
C; Keywords: amidated carboxyl end; pyroglutamic acid
F; 1/Modified site: pyrrolidone carboxylic acid (Gln) #status experimental
F;11/Modified site: amidated carboxyl end (Met) #status experimental
                           18.2%; Score 2; DB 2; Length 11;
  Query Match
                           100.0%; Pred. No. 3e+04;
  Best Local Similarity
                                                                               0;
                                0; Mismatches
                                                    0; Indels
                                                                   0; Gaps
             2; Conservative
  Matches
           10 LM 11
QУ
               11
Db
           10 LM 11
```

```
substance P-like peptide I - frog (Pseudophryne guentheri)
C; Species: Pseudophryne guentheri
C;Date: 30-Jan-1993 #sequence revision 30-Jan-1993 #text change 02-Sep-2000
C:Accession: E60409
R; Simmaco, M.; Severini, C.; De Biase, D.; Barra, D.; Bossa, F.; Roberts, J.D.;
Melchiorri, P.; Erspamer, V.
Peptides 11, 299-304, 1990
A; Title: Six novel tachykinin- and bombesin-related peptides from the skin of
the Australian frog Pseudophryne guentheri.
A; Reference number: A60409; MUID: 90287814; PMID: 2356157
A; Accession: E60409
A; Molecule type: protein
A; Residues: 1-11 <SIM>
C; Superfamily: unassigned animal peptides
C; Keywords: amidated carboxyl end; pyroglutamic acid
F;1/Modified site: pyrrolidone carboxylic acid (Gln) #status experimental
F;11/Modified site: amidated carboxyl end (Met) #status experimental
                          18.2%; Score 2; DB 2; Length 11;
  Query Match
  Best Local Similarity
                          100.0%; Pred. No. 3e+04;
                                                                               0;
             2; Conservative
                                0; Mismatches
                                                   0; Indels
                                                                  0;
                                                                      Gaps
  Matches
           10 LM 11
Qу
              11
           10 LM 11
Db
RESULT 17
B26744
megascoliakinin - garden dagger wasp
N: Alternate names: 6-Thr-bradykinin-Lys-Ala
C; Species: Megascolia flavifrons (garden dagger wasp)
C;Date: 08-Mar-1989 #sequence_revision 08-Mar-1989 #text_change 18-Aug-2000
C; Accession: B26744; A28609
R; Yasuhara, T.; Mantel, P.; Nakajima, T.; Piek, T.
Toxicon 25, 527-535, 1987
A; Title: Two kinins isolated from an extract of the venom reservoirs of the
solitary wasp Megascolia flavifrons.
A; Reference number: A94322; MUID: 87293024; PMID: 3617088
A; Accession: B26744
A; Molecule type: protein
A; Residues: 1-11 <YAS>
R; Nakajima, T.; Piek, T.; Yashuara, T.; Mantel, P.
Toxicon 26, 34, 1988
A; Title: Two kinins isolated from the venom of Megascolia flavifrons.
A; Reference number: A28609
A; Accession: A28609
A; Molecule type: protein
A; Residues: 1-11 <NAK>
C; Superfamily: unassigned animal peptides
C; Keywords: bradykinin; presynaptic neurotoxin; venom
                          18.2%; Score 2; DB 2; Length 11;
  Query Match
                          100.0%; Pred. No. 3e+04;
  Best Local Similarity
                                                    0; Indels
                                                                               0;
                                  0; Mismatches
                                                                   0;
                                                                      Gaps
             2: Conservative
```

E60409

```
4 RK 5
Qy
              11
            9 RK 10
Db
RESULT 18
S23308
substance P - rainbow trout
C; Species: Oncorhynchus mykiss (rainbow trout)
C;Date: 19-Mar-1997 #sequence revision 19-Mar-1997 #text_change 18-Aug-2000
C; Accession: S23308
R; Jensen, J.; Conlon, J.M.
Eur. J. Biochem. 206, 659-664, 1992
A; Title: Substance-P-related and neurokinin-A-related peptides from the brain of
the cod and trout.
A; Reference number: S23186; MUID: 92298992; PMID: 1376687
A; Accession: S23308
A; Molecule type: protein
A; Residues: 1-11 <JEN>
A; Experimental source: brain
C; Function:
A; Description: may play a physiological role in the regulation of cardiovascular
and gastrointestinal functions
A; Note: substance P is derived by post-translational processing of
preprotachykinin A
C; Superfamily: unassigned animal peptides
C; Keywords: neuropeptide; amidated carboxyl end; tachykinin
F;11/Modified site: amidated carboxyl end (Met) #status predicted
                           18.2%; Score 2; DB 2; Length 11;
  Ouery Match
                          100.0%; Pred. No. 3e+04;
  Best Local Similarity
                                                                               0;
                                  0; Mismatches
                                                     0; Indels
                                                                   0;
                                                                       Gaps
             2; Conservative
  Matches
           10 LM 11
Qу
           10 LM 11
RESULT 19
S23306
substance P - Atlantic cod
C; Species: Gadus morhua (Atlantic cod)
C;Date: 19-Mar-1997 #sequence revision 19-Mar-1997 #text change 18-Aug-2000
C; Accession: S23306
R; Jensen, J.; Conlon, J.M.
Eur. J. Biochem. 206, 659-664, 1992
A; Title: Substance-P-related and neurokinin-A-related peptides from the brain of
the cod and trout.
A; Reference number: S23186; MUID: 92298992; PMID: 1376687
A; Accession: S23306
A; Molecule type: protein
A; Residues: 1-11 <JEN>
A; Experimental source: brain
C; Function:
A; Description: may play a physiological role in the regulation of cardiovascular
and gastrointestinal functions
```

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A; Note: substance P is derived by post-translational processing of
preprotachykinin A
C; Superfamily: unassigned animal peptides
C; Keywords: neuropeptide; amidated carboxyl end; tachykinin
F;11/Modified site: amidated carboxyl end (Met) #status predicted
                          18.2%; Score 2; DB 2; Length 11;
  Ouery Match
  Best Local Similarity
                          100.0%; Pred. No. 3e+04;
                                                                              0;
                               0; Mismatches 0; Indels
                                                                  0; Gaps
 Matches
             2: Conservative
           10 LM 11
Qу
              \mathbf{H}
           10 LM 11
Db
RESULT 20
B60409
kassinin-like peptide K-I - frog (Pseudophryne guentheri)
C; Species: Pseudophryne guentheri
C;Date: 30-Jan-1993 #sequence revision 30-Jan-1993 #text change 18-Aug-2000
C; Accession: B60409
R; Simmaco, M.; Severini, C.; De Biase, D.; Barra, D.; Bossa, F.; Roberts, J.D.;
Melchiorri, P.; Erspamer, V.
Peptides 11, 299-304, 1990
A; Title: Six novel tachykinin- and bombesin-related peptides from the skin of
the Australian frog Pseudophryne guentheri.
A; Reference number: A60409; MUID: 90287814; PMID: 2356157
A; Accession: B60409
A; Molecule type: protein
A; Residues: 1-11 <SIM>
A; Note: this peptide was also found in a deamidated form
C; Superfamily: unassigned animal peptides
C; Keywords: amidated carboxyl end; pyroglutamic acid
F;1/Modified site: pyrrolidone carboxylic acid (Gln) #status experimental
F;11/Modified site: amidated carboxyl end (Met) (partial) #status experimental
                          18.2%; Score 2; DB 2; Length 11;
  Query Match
                          100.0%; Pred. No. 3e+04;
  Best Local Similarity
                                                                              0;
            2; Conservative 0; Mismatches 0; Indels
                                                                  0; Gaps
  Matches
Qу
           10 LM 11
              11
           10 LM 11
Db
RESULT 21
C60409
kassinin-like peptide K-II - frog (Pseudophryne guentheri)
C; Species: Pseudophryne guentheri
C;Date: 30-Jan-1993 #sequence revision 30-Jan-1993 #text change 18-Aug-2000
C; Accession: C60409
R; Simmaco, M.; Severini, C.; De Biase, D.; Barra, D.; Bossa, F.; Roberts, J.D.;
Melchiorri, P.; Erspamer, V.
Peptides 11, 299-304, 1990
A; Title: Six novel tachykinin- and bombesin-related peptides from the skin of
the Australian frog Pseudophryne guentheri.
A; Reference number: A60409; MUID: 90287814; PMID: 2356157
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A; Accession: C60409
A; Molecule type: protein
A; Residues: 1-11 <SIM>
A; Note: this peptide was also found in a deamidated form
C; Superfamily: unassigned animal peptides
C: Keywords: amidated carboxyl end; pyroglutamic acid
F;1/Modified site: pyrrolidone carboxylic acid (Gln) #status experimental
F;11/Modified site: amidated carboxyl end (Met) (partial) #status experimental
                          18.2%; Score 2; DB 2; Length 11;
  Query Match
  Best Local Similarity
                          100.0%; Pred. No. 3e+04;
                                                                      Gaps
                                                                               0;
             2; Conservative
                                 0; Mismatches
                                                    0; Indels
                                                                  0;
           10 LM 11
Qγ
              11
           10 LM 11
Db
RESULT 22
s07203
uperolein - frog (Uperoleia marmorata)
C; Species: Uperoleia marmorata
C;Date: 12-Feb-1993 #sequence_revision 12-Mar-1993 #text_change 18-Aug-2000
C; Accession: S07203
R; Anastasi, A.; Erspamer, V.; Endean, R.
Experientia 31, 394-395, 1975
A; Title: Structure of uperolein, a physalaemin-like endecapeptide occurring in
the skin of Uperoleia rugosa and Uperoleia marmorata.
A; Reference number: S07203; MUID: 75131227; PMID: 1120493
A; Accession: S07203
A; Molecule type: protein
A; Residues: 1-11 <ANA>
C; Superfamily: unassigned animal peptides
C; Keywords: amidated carboxyl end; pyroglutamic acid; skin; tachykinin
F; 1/Modified site: pyrrolidone carboxylic acid (Gln) #status experimental
F;11/Modified site: amidated carboxyl end (Met) #status experimental
                           18.2%; Score 2; DB 2; Length 11;
  Query Match
                           100.0%; Pred. No. 3e+04;
  Best Local Similarity
                                                                      Gaps
                                 0; Mismatches
                                                   0; Indels
                                                                  0:
                Conservative
           10 LM 11
Qу
              11
           10 LM 11
RESULT 23
S07201
physalaemin - frog (Physalaemus fuscomaculatus)
C; Species: Physalaemus fuscomaculatus
C;Date: 12-Feb-1993 #sequence_revision 12-Mar-1993 #text_change 18-Aug-2000
C; Accession: S07201
R; Erspamer, V.; Anastasi, A.; Bertaccini, G.; Cei, J.M.
Experientia 20, 489-490, 1964
A; Title: Structure and pharmacological actions of physalaemin, the main active
polypeptide of the skin of Physalaemus fuscumaculatus.
A; Reference number: S07201; MUID: 66076612; PMID: 5857249
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A; Accession: S07201
A: Molecule type: protein
A; Residues: 1-11 <ERS>
C; Superfamily: unassigned animal peptides
C: Keywords: amidated carboxyl end; pyroglutamic acid; skin; tachykinin
F;1/Modified site: pyrrolidone carboxylic acid (Gln) #status experimental
F;11/Modified site: amidated carboxyl end (Met) #status experimental
                          18.2%; Score 2; DB 2; Length 11;
  Query Match
                          100.0%; Pred. No. 3e+04;
  Best Local Similarity
                                                   0; Indels
                                                                  0; Gaps
                                                                              0;
             2; Conservative
                                0; Mismatches
  Matches
           10 LM 11
Qу
              11
           10 LM 11
Db
RESULT 24
A61033
ranatachykinin A - bullfrog
C; Species: Rana catesbeiana (bullfrog)
C;Date: 31-Dec-1993 #sequence_revision 31-Dec-1993 #text_change 18-Aug-2000
C; Accession: A61033; JE0426
R; Kangawa, K.; Kozawa, H.; Hino, J.; Minamino, N.; Matsuo, H.
Regul. Pept. 42(Suppl.1), S12, 1992
A; Title: Isolation of four novel tachykinins from frog (Rana catesbeiana) brain
and intestine.
A; Reference number: A61033
A; Accession: A61033
A; Molecule type: protein
A: Residues: 1-11 <KAN>
R; Kozawa, H.; Hino, J.; Minamino, N.; Kangawa, K.; Matsuo, H.
Biochem. Biophys. Res. Commun. 177, 588-595, 1991
A; Title: Isolation of four novel tachykinins from frog (Rana catesbeiana) brain
and intestine.
A; Reference number: JE0426; MUID: 91254337; PMID: 2043143
A; Accession: JE0426
A; Molecule type: protein
A; Residues: 1-11 < KOZ>
C; Superfamily: unassigned animal peptides
C; Keywords: amidated carboxyl end; neuropeptide
F;11/Modified site: amidated carboxyl end (Met) #status experimental
                          18.2%; Score 2; DB 2; Length 11;
  Query Match
  Best Local Similarity
                          100.0%; Pred. No. 3e+04;
                                                                               0;
             2; Conservative
                                  0; Mismatches
                                                    0; Indels
                                                                  0; Gaps
  Matches
           10 LM 11
Qу
           10 LM 11
Db
RESULT 25
B43669
hypothetical protein (rhdA 5' region) - Synechococcus sp. (fragment)
C; Species: Synechococcus sp.
C;Date: 03-Mar-1993 #sequence revision 03-Mar-1993 #text change 30-Sep-1993
```

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C; Accession: B43669
R; Laudenbach, D.E.; Ehrhardt, D.; Green, L.; Grossman, A.
J. Bacteriol. 173, 2751-2760, 1991
A; Title: Isolation and characterization of a sulfur-regulated gene encoding a
periplasmically localized protein with sequence similarity to rhodanese.
A; Reference number: A43669; MUID: 91210163; PMID: 1708376
A; Accession: B43669
A; Status: preliminary
A; Molecule type: DNA
A; Residues: 1-11 <LAU>
A; Cross-references: GB:M65244
                          18.2%; Score 2; DB 2; Length 11;
  Query Match
                          100.0%; Pred. No. 3e+04;
  Best Local Similarity
                                                    0; Indels
                               0; Mismatches
                                                                   0; Gaps
            2; Conservative
            1 AK 2
Qу
              | | |
            6 AK 7
Db
RESULT 26
PC2372
58K heat shock protein groEL [similarity] - Bacillus cereus (strain ts-4)
(fragment)
C; Species: Bacillus cereus
C;Date: 20-Apr-2000 #sequence revision 20-Apr-2000 #text_change 20-Apr-2000
C; Accession: PC2372
R; Matsuno, K.; Miyamoto, T.; Yamaguchi, K.; Sayed, M.A.; Kajiwara, T.; Hatano,
Biosci. Biotechnol. Biochem. 59, 231-235, 1995
A; Title: Identification of DNA-binding proteins changed after induction of
sporulation in Bacillus cereus.
A; Reference number: PC2369; MUID: 95218265; PMID: 7766022
A; Accession: PC2372
A; Status: preliminary
A; Molecule type: protein
A; Residues: 1-11 <MAS>
C; Keywords: heat shock; molecular chaperone; stress-induced protein
                           18.2%; Score 2; DB 2; Length 11;
  Ouery Match
                           100.0%; Pred. No. 3e+04;
  Best Local Similarity
                                                                               0;
                                                    0; Indels
                                                                   0; Gaps
             2; Conservative
                                  0; Mismatches
  Matches
Qу
            1 AK 2
              \perp
            1 AK 2
Db
RESULT 27
S19775
wound-induced protein - tomato (fragment)
C; Species: Lycopersicon esculentum (tomato)
C;Date: 30-Jun-1992 #sequence_revision 30-Jun-1992 #text change 09-Sep-1997
C; Accession: S19775
R; Parsons, B.L.
submitted to the EMBL Data Library, May 1991
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A; Reference number: S19773
A; Accession: S19775
A; Molecule type: mRNA
A; Residues: 1-11 < PAR>
A;Cross-references: EMBL:X59884; NID:g19323; PID:g19324
                          18.2%; Score 2; DB 2; Length 11;
  Query Match
                          100.0%; Pred. No. 3e+04;
  Best Local Similarity
                                 0; Mismatches
             2; Conservative
                                                    0; Indels
                                                                  0; Gaps
                                                                              0;
            8 SS 9
            3 SS 4
RESULT 28
S71304
amine oxidase (copper-containing) (EC 1.4.3.6) II - Aspergillus niger (fragment)
C; Species: Aspergillus niger
C;Date: 12-Feb-1998 #sequence_revision 01-May-1998 #text change 07-May-1999
C; Accession: S71304
R; Frebort, I.; Tamaki, H.; Ishida, H.; Pec, P.; Luhova, L.; Tsuno, H.; Halata,
M.; Asano, Y.; Kato, Y.; Matsushita, K.; Toyama, H.; Kumagai, H.; Adachi, O.
Eur. J. Biochem. 237, 255-265, 1996
A; Title: Two distinct quinoprotein amine oxidases are induced by n-butylamine in
the mycelia of Aspergillus niger AKU 3302: purification, characterization, cDNA
cloning and sequencing.
A; Reference number: S71303; MUID: 96203933; PMID: 8620882
A; Accession: S71304
A; Molecule type: protein
A; Residues: 1-11 <FRE>
C; Keywords: copper binding; monomer; oxidoreductase; quinoprotein; topaquinone
                          18.2%; Score 2; DB 2; Length 11;
  Query Match
                          100.0%; Pred. No. 3e+04;
  Best Local Similarity
             2; Conservative
                                 0; Mismatches
                                                    0; Indels
                                                                      Gaps
  Matches
            9 SL 10
Qy
              11
Db
           10 SL 11
RESULT 29
A34135
DNA-binding protein p - Crithidia fasciculata mitochondrion (fragment)
C; Species: mitochondrion Crithidia fasciculata
C;Date: 30-Sep-1991 #sequence revision 30-Sep-1991 #text change 07-Dec-1999
C; Accession: A34135
R; Tittawella, I.
FEBS Lett. 260, 57-61, 1990
A; Title: Kinetoplast DNA-aggregating proteins from the parasitic protozoan
Crithidia fasciculata.
A; Reference number: A34135
A; Accession: A34135
A; Molecule type: protein
A; Residues: 1-11 <TIT>
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C; Genetics:

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A; Genetic code: SGC6
C; Keywords: mitochondrion
                          18.2%; Score 2; DB 2; Length 11;
  Query Match
                          100.0%; Pred. No. 3e+04;
  Best Local Similarity
                                                                              0;
            2; Conservative 0; Mismatches
                                                 0; Indels
                                                                  0; Gaps
            4 RK 5
Qу
              | |
            8 RK 9
Db
RESULT 30
A26120
6-phosphofructokinase (EC 2.7.1.11) - pig roundworm (fragment)
N; Alternate names: phosphofructokinase; phosphohexokinase
C; Species: Ascaris suum (pig roundworm)
C;Date: 15-Dec-1988 #sequence_revision 15-Dec-1988 #text change 28-Apr-1993
C; Accession: A26120
R; Kulkarni, G.; Rao, G.S.J.; Srinivasan, N.G.; Hofer, H.W.; Yuan, P.M.; Harris,
J. Biol. Chem. 262, 32-34, 1987
A; Title: Ascaris suum phosphofructokinase. Phosphorylation by protein kinase and
sequence of the phosphopeptide.
A; Reference number: A26120; MUID: 87083467; PMID: 3025208
A; Accession: A26120
A; Molecule type: protein
A; Residues: 1-11 <KUL>
C; Keywords: glycolysis; phosphotransferase
                          18.2%; Score 2; DB 2; Length 11;
                          100.0%; Pred. No. 3e+04;
  Best Local Similarity
                                                                              0;
                                                                  0; Gaps
                                                    0; Indels
            2; Conservative
                              0; Mismatches
  Matches
            1 AK 2
Qу
              II
            1 AK 2
Db
RESULT 31
A35594
buccalin - California sea hare
C; Species: Aplysia californica (California sea hare)
C;Date: 14-Sep-1990 #sequence_revision 14-Sep-1990 #text change 24-Jun-1993
C; Accession: A35594
R; Cropper, E.C.; Miller, M.W.; Tenenbaum, R.; Kolks, M.A.G.; Kupfermann, I.;
Weiss, K.R.
Proc. Natl. Acad. Sci. U.S.A. 85, 6177-6181, 1988
A; Title: Structure and action of buccalin: a modulatory neuropeptide localized
to an identified small cardioactive peptide-containing cholinergic motor neuron
of Aplysia californica.
A; Reference number: A35594; MUID: 88320404; PMID: 3413086
A; Accession: A35594
A; Status: preliminary
A; Molecule type: protein
A; Residues: 1-11 <CRO>
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A; Genome: mitochondrion

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18.2%; Score 2; DB 2; Length 11;
  Query Match
  Best Local Similarity 100.0%; Pred. No. 3e+04;
                                                                               0;
                                0; Mismatches
                                                   0; Indels
                                                                  0;
                                                                      Gaps
            2; Conservative
            9 SL 10
Qу
              | | |
            4 SL 5
Db
RESULT 32
S69349
neuropeptide FFamide - great pond snail
C; Species: Lymnaea stagnalis (great pond snail)
C;Date: 24-Jul-1998 #sequence revision 24-Jul-1998 #text change 17-Mar-1999
C:Accession: S69349
R;Li, K.W.; El Filali, Z.; van Golen, F.A.; Geraerts, W.P.M.
Eur. J. Biochem. 229, 70-72, 1995
A; Title: Identification of a novel amide peptide, GLTPNMNSLFF-NH(2), involved in
the control of vas deferens motility in Lymnaea stagnalis.
A; Reference number: S69349; MUID: 95262689; PMID: 7744051
A; Accession: S69349
A; Molecule type: protein
A; Residues: 1-11 <LIK>
A; Experimental source: penis complex
C; Function:
A; Description: enhances the contraction frequency and contraction amplitude of
the vas deferens
A; Note: control of male reproductive behavior
C; Keywords: amidated carboxyl end; neuropeptide
F;11/Modified site: amidated carboxyl end (Phe) #status experimental
                          18.2%; Score 2; DB 2; Length 11;
  Query Match
                          100.0%; Pred. No. 3e+04;
  Best Local Similarity
                                                    0; Indels
                                                                               0;
             2; Conservative
                                0; Mismatches
  Matches
            7 NS 8
Qу
              \perp
            7 NS 8
Db
RESULT 33
S05002
corazonin - American cockroach
C; Species: Periplaneta americana (American cockroach)
C;Date: 07-Sep-1990 #sequence revision 09-Apr-1998 #text change 09-Apr-1998
C; Accession: S05002
R; Veenstra, J.A.
FEBS Lett. 250, 231-234, 1989
A; Title: Isolation and structure of corazonin, a cardioactive peptide from the
american cockroach.
A; Reference number: S05002; MUID: 89325572; PMID: 2753132
A; Accession: S05002
A; Molecule type: protein
A; Residues: 1-11 <VEE>
C; Keywords: amidated carboxyl end; neuropeptide; pyroglutamic acid
F;1/Modified site: pyrrolidone carboxylic acid (Gln) #status experimental
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F;11/Modified site: amidated carboxyl end (Asn) #status experimental
                          18.2%; Score 2; DB 2; Length 11;
  Query Match
                          100.0%; Pred. No. 3e+04;
  Best Local Similarity
                                                                              0:
                                                   0; Indels
                                                                  0; Gaps
             2; Conservative
                                0; Mismatches
            3 SR 4
Qу
              II
            6 SR 7
Db
RESULT 34
S33300
probable substance P - smaller spotted catshark
C; Species: Scyliorhinus canicula (smaller spotted catshark, smaller spotted
dogfish)
C;Date: 19-Mar-1997 #sequence revision 19-Mar-1997 #text_change 24-Mar-1999
C; Accession: S33300
R; Waugh, D.; Wang, Y.; Hazon, N.; Balment, R.J.; Conlon, J.M.
Eur. J. Biochem. 214, 469-474, 1993
A; Title: Primary structures and biological activities of substance-P-related
peptides from the brain of the dogfish, Scyliorhinus canicula.
A; Reference number: S33300; MUID: 93292508; PMID: 7685693
A; Accession: S33300
A; Molecule type: protein
A; Residues: 1-11 <WAU>
A; Experimental source: brain
C; Function:
A; Description: may play a physiological role in the regulation of cardiovascular
and gastrointestinal functions
A; Note: substance P is derived by post-translational processing of
preprotachykinin A
C; Keywords: amidated carboxyl end; neuropeptide; tachykinin
F;11/Modified site: amidated carboxyl end (Met) #status predicted
                          18.2%; Score 2; DB 2; Length 11;
  Query Match
                          100.0%; Pred. No. 3e+04;
  Best Local Similarity
                                                                               0;
             2; Conservative
                                                   0; Indels
                                                                  0; Gaps
                                0; Mismatches
  Matches
Qу
           10 LM 11
              \mathbf{I}
Db
           10 LM 11
RESULT 35
S43626
cytochrome-c oxidase (EC 1.9.3.1) chain Vb-H - trout (fragment)
C; Species: Salmo sp. (trout)
C;Date: 19-Mar-1997 #sequence_revision 01-Aug-1997 #text change 02-Jul-1998
C; Accession: S43626
R; Freund, R.; Kadenbach, B.
Eur. J. Biochem. 221, 1111-1116, 1994
A; Title: Identification of tissue-specific isoforms for subunits Vb and VIIa of
cytochrome c oxidase isolated from rainbow trout.
A; Reference number: S43624; MUID: 94237150; PMID: 8181469
A; Accession: S43626
A; Status: preliminary
```

```
A; Molecule type: protein
A; Residues: 1-11 <FRE>
C; Keywords: electron transfer; membrane-associated complex; oxidoreductase;
respiratory chain; transmembrane protein
                          18.2%; Score 2; DB 2; Length 11;
  Query Match
                          100.0%; Pred. No. 3e+04;
  Best Local Similarity
                                                                   0; Gaps
                                                                               0;
             2; Conservative
                                                    0;
                                                       Indels
                                 0; Mismatches
  Matches
            5 KG 6
Qу
              \perp
            4 KG 5
Db
RESULT 36
D42965
talin - chicken (fragment)
C; Species: Gallus gallus (chicken)
C;Date: 05-Jan-1996 #sequence revision 05-Jan-1996 #text change 05-Jan-1996
C; Accession: D42965
R; Hagmann, J.; Grob, M.; Burger, M.M.
J. Biol. Chem. 267, 14424-14428, 1992
A; Title: The cytoskeletal protein talin is O-glycosylated.
A; Reference number: A42965; MUID: 92332560; PMID: 1629228
A; Accession: D42965
A; Status: preliminary
A; Molecule type: protein
A; Residues: 1-11 <HAG>
                           18.2%; Score 2; DB 2; Length 11;
  Query Match
                           100.0%; Pred. No. 3e+04;
  Best Local Similarity
                                                    0; Indels
                                                                     Gaps
                               0; Mismatches
                                                                   0:
             2; Conservative
  Matches
            8 SS 9
Qy
               11
            4 SS 5
RESULT 37
I65231
CCK-B gastrin receptor isoform - human (fragment)
C; Species: Homo sapiens (man)
C;Date: 29-May-1998 #sequence revision 29-May-1998 #text change 21-Jul-2000
C; Accession: I65231
R; Miyake, A.
Biochem. Biophys. Res. Commun. 208, 230-237, 1995
A; Title: A truncated isoform of human CCK-B/gastrin receptor generated by
alternative usage of a novel exon.
A; Reference number: I52307; MUID: 95194412; PMID: 7887934
A; Accession: 165231
A; Status: preliminary; translated from GB/EMBL/DDBJ
A; Molecule type: mRNA
A; Residues: 1-11 <RES>
A; Cross-references: GB: S76072; NID: g913752; PIDN: AAB33740.1; PID: g913753
C; Genetics:
A; Gene: CCK-B
```

```
18.2%; Score 2; DB 2; Length 11;
  Query Match
                          100.0%; Pred. No. 3e+04;
  Best Local Similarity
                                                  0; Indels
                                                                  0; Gaps
                                                                              0;
                               0; Mismatches
            2; Conservative
            6 GN 7
Qу
              11
            5 GN 6
Db
RESULT 38
E57789
gallbladder stone matrix protein, 25K - human (fragment)
C; Species: Homo sapiens (man)
C;Date: 23-Feb-1996 #sequence_revision 23-Feb-1996 #text_change 23-Feb-1996
C; Accession: E57789
R; Binette, J.P.; Binette, M.B.
submitted to the Protein Sequence Database, February 1996
A; Description: The proteins of gallbladder stones.
A; Reference number: A57789
A; Accession: E57789
A; Status: preliminary
A; Molecule type: protein
A; Residues: 1-11 <BIN>
                          18.2%; Score 2; DB 2;
  Query Match
                          100.0%; Pred. No. 3e+04;
  Best Local Similarity
                                                   0; Indels
                                                                  0;
                                                                      Gaps
                                0; Mismatches
             2; Conservative
            4 RK 5
Qy
              11
            2 RK 3
RESULT 39
I52980
glucocerebrosidase - human (fragment)
C; Species: Homo sapiens (man)
C;Date: 02-Jul-1996 #sequence_revision 02-Jul-1996 #text change 05-Nov-1999
C; Accession: I52980; I65971
R; Reiner, O.; Wigderson, M.; Horowitz, M.
DNA 7, 107-116, 1988
A; Title: Structural analysis of the human glucocerebrosidase genes.
A; Reference number: I52980; MUID: 88195776; PMID: 3359914
A; Accession: I52980
A; Status: preliminary; translated from GB/EMBL/DDBJ
A; Molecule type: DNA
A; Residues: 1-11 <RES>
A; Cross-references: GB:M18916; NID:g183023; PIDN:AAA35878.1; PID:g183024
A; Accession: I65971
A; Status: preliminary; translated from GB/EMBL/DDBJ
A; Molecule type: DNA
A; Residues: 1-11 <RE2>
A; Cross-references: GB:M18917; NID:g183025; PIDN:AAA35879.1; PID:g183026
                           18.2%; Score 2; DB 2; Length 11;
  Query Match
                          100.0%; Pred. No. 3e+04;
  Best Local Similarity
                                                                               0;
                                                                  0; Gaps
                                  0; Mismatches
                                                    0;
                                                        Indels
  Matches
             2; Conservative
```

```
8 SS 9
Qу
              4 SS 5
Db
RESULT 40
PT0273
Ig heavy chain CRD3 region (clone 3-109A) - human (fragment)
C; Species: Homo sapiens (man)
C;Date: 30-Sep-1993 #sequence revision 30-Sep-1993 #text change 16-Aug-1996
C; Accession: PT0273
R; Yamada, M.; Wasserman, R.; Reichard, B.A.; Shane, S.; Caton, A.J.; Rovera, G.
J. Exp. Med. 173, 395-407, 1991
A; Title: Preferential utilization of specific immunoglobulin heavy chain
diversity and joining segments in adult human peripheral blood B lymphocytes.
A; Reference number: PT0222; MUID: 91108337; PMID: 1899102
A; Accession: PT0273
A; Molecule type: DNA
A; Residues: 1-11 < YAM>
A; Experimental source: B lymphocyte
C; Keywords: heterotetramer; immunoglobulin
                          18.2%; Score 2; DB 2; Length 11;
  Query Match
                          100.0%; Pred. No. 3e+04;
  Best Local Similarity
                                                                      Gaps
                                                                               0;
             2; Conservative
                                 0; Mismatches
                                                    0; Indels
                                                                  0;
  Matches
            3 SR 4
Qу
              11
Db
            2 SR 3
RESULT 41
PT0302
Ig heavy chain CRD3 region (clone 5-112) - human (fragment)
C; Species: Homo sapiens (man)
C;Date: 30-Sep-1993 #sequence revision 30-Sep-1993 #text change 16-Aug-1996
C; Accession: PT0302
R; Yamada, M.; Wasserman, R.; Reichard, B.A.; Shane, S.; Caton, A.J.; Rovera, G.
J. Exp. Med. 173, 395-407, 1991
A; Title: Preferential utilization of specific immunoglobulin heavy chain
diversity and joining segments in adult human peripheral blood B lymphocytes.
A; Reference number: PT0222; MUID: 91108337; PMID: 1899102
A; Accession: PT0302
A; Molecule type: DNA
A; Residues: 1-11 < YAM>
A; Experimental source: B lymphocyte
C; Keywords: heterotetramer; immunoglobulin
                           18.2%; Score 2; DB 2; Length 11;
  Query Match
                           100.0%; Pred. No. 3e+04;
  Best Local Similarity
                                                                               0;
                                 0; Mismatches
                                                    0; Indels
                                                                       Gaps
             2; Conservative
  Matches
            8 SS 9
Qy
              11
            7 SS 8
Db
```

```
RESULT 42
S13279
Ile-Ser-bradykinin - human (fragment)
N; Alternate names: T-kinin
C; Species: Homo sapiens (man)
C;Date: 02-Dec-1993 #sequence_revision 13-Mar-1997 #text change 24-Jul-1998
C:Accession: S13279
R; Wunderer, G.; Walter, I.; Eschenbacher, B.; Lang, M.; Kellermann, J.;
Kindermann, G.
Biol. Chem. Hoppe-Seyler 371, 977-981, 1990
A; Title: Ile-Ser-bradykinin is an aberrant permeability factor in various human
malignant effusions.
A; Reference number: S13279; MUID: 91166748; PMID: 2076202
A; Accession: S13279
A; Molecule type: protein
A; Residues: 1-11 <WUN>
C; Keywords: bradykinin
                          18.2%; Score 2; DB 2; Length 11;
  Query Match
  Best Local Similarity
                          100.0%; Pred. No. 3e+04;
             2; Conservative
                              0; Mismatches
                                                   0; Indels
                                                                  0; Gaps
                                                                              0;
  Matches
            3 SR 4
Qу
              11
            2 SR 3
Db
RESULT 43
I54193
Rhesus blood group CcEe protein - human (fragment)
C; Species: Homo sapiens (man)
C;Date: 06-Sep-1996 #sequence revision 06-Sep-1996 #text change 21-Jul-2000
C; Accession: I54193
R; Cherif-Zahar, B.; Le Van Kim, C.; Rouillac, C.; Raynal, V.; Cartron, J.P.;
Colin, Y.
Genomics 19, 68-74, 1994
A; Title: Organization of the gene (RHCE) encoding the human blood group RhCcEe
antigens and characterization of the promoter region.
A; Reference number: I54193; MUID: 94245182; PMID: 8188244
A; Accession: I54193
A; Status: preliminary; translated from GB/EMBL/DDBJ
A; Molecule type: DNA
A; Residues: 1-11 < RES>
A;Cross-references: GB:S70456; NID:g546795; PIDN:AAD14061.1; PID:g4261761
C; Genetics:
A; Gene: GDB: RHCE
A;Cross-references: GDB:229957; OMIM:111700
A; Map position: 1p36.2-1p34
                           18.2%; Score 2; DB 2; Length 11;
  Query Match
                          100.0%; Pred. No. 3e+04;
  Best Local Similarity
                                                                  0; Gaps
                                                                               0;
                                                    0; Indels
             2; Conservative
                                 0; Mismatches
            8 SS 9
Qy
              Db
            2 SS 3
```

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RESULT 44
S68649
spermadhesin AQN-3 - pig (fragments)
C; Species: Sus scrofa domestica (domestic pig)
C;Date: 04-Dec-1997 #sequence_revision 12-Dec-1997 #text change 17-Mar-1999
C:Accession: S68649
R; Calvete, J.J.; Dostalova, Z.; Sanz, L.; Adermann, K.; Thole, H.H.; Toepfer-
Petersen, E.
FEBS Lett. 379, 207-211, 1996
A; Title: Mapping the heparin-binding domain of boar spermadhesins.
A; Reference number: S68648; MUID: 96184566; PMID: 8603690
A; Accession: S68649
A; Status: preliminary
A; Molecule type: protein
A; Residues: 1-6;7-11 <CAL>
                          18.2%; Score 2; DB 2; Length 11;
  Query Match
                          100.0%; Pred. No. 3e+04;
  Best Local Similarity
  Matches
            2; Conservative
                               0; Mismatches
                                                   0; Indels
                                                                  0; Gaps
                                                                              0;
            8 SS 9
Qу
              11
           10 SS 11
RESULT 45
S68637
acetylcholinesterase (EC 3.1.1.7) P chain - bovine (fragment)
C; Species: Bos primigenius taurus (cattle)
C;Date: 04-Dec-1997 #sequence_revision 04-Dec-1997 #text_change 30-Jan-1998
C; Accession: S68637
R; Boschetti, N.; Brodbeck, U.
FEBS Lett. 380, 133-136, 1996
A; Title: The membrane anchor of mammalian brain acetylcholinesterase consists of
a single glycosylated protein of 22 kDa.
A; Reference number: S68637; MUID: 96181683; PMID: 8603722
A; Accession: S68637
A; Molecule type: protein
A; Residues: 1-11 <BOS>
A; Experimental source: brain
C; Keywords: carboxylic ester hydrolase; glycoprotein; membrane protein
                          18.2%; Score 2; DB 2; Length 11;
  Best Local Similarity 100.0%; Pred. No. 3e+04;
                                0; Mismatches
                                                  0; Indels
  Matches
            2; Conservative
            2 KS 3
QУ
              \mathbf{H}
            4 KS 5
Db
RESULT 46
A33571
follistatin - bovine (fragment)
C; Species: Bos primigenius taurus (cattle)
```

```
C;Date: 09-Mar-1990 #sequence revision 09-Mar-1990 #text change 30-Sep-1993
C; Accession: A33571
R; Gospodarowicz, D.; Lau, K.
Biochem. Biophys. Res. Commun. 165, 292-298, 1989
A; Title: Pituitary follicular cells secrete both vascular endothelial growth
factor and follistatin.
A; Reference number: A33571; MUID: 90073725; PMID: 2590228
A; Accession: A33571
A; Status: preliminary
A; Molecule type: protein
A; Residues: 1-11 <GOS>
                          18.2%; Score 2; DB 2; Length 11;
  Query Match
                          100.0%; Pred. No. 3e+04;
  Best Local Similarity
                                                   0; Indels
                              0; Mismatches
                                                                  0: Gaps
            2; Conservative
            1 AK 2
Qу
              8 AK 9
Db
RESULT 47
S23926
major glycoprotein PAS-6 - bovine (fragment)
C; Species: Bos primigenius taurus (cattle)
C; Date: 19-Mar-1997 #sequence revision 01-Feb-1999 #text change 01-Feb-1999
C; Accession: S23926
R; Kim, D.H.; Kanno, C.; Mizokami, Y.
Biochim. Biophys. Acta 1122, 203-211, 1992
A; Title: Purification and characterization of major glycoproteins, PAS-6 and
PAS-7, from bovine milk fat globule membrane.
A; Reference number: S23926; MUID: 92353107; PMID: 1643094
A; Accession: S23926
A; Molecule type: protein
A; Residues: 1-11 <KIM>
C; Keywords: glycoprotein; milk; blocked amino end
                          18.2%; Score 2; DB 2; Length 11;
  Query Match
                          100.0%; Pred. No. 3e+04;
  Best Local Similarity
                               0; Mismatches
                                                    0; Indels
  Matches
            2; Conservative
            6 GN 7
Qу
              \perp
            3 GN 4
RESULT 48
A14454
6-phosphofructokinase (EC 2.7.1.11) - sheep (fragment)
C; Species: Ovis orientalis aries, Ovis ammon aries (domestic sheep)
C;Date: 05-Jun-1987 #sequence_revision 05-Jun-1987 #text_change 28-Apr-1993
C; Accession: A14454
R; Fordyce, A.M.; Midwinter, G.G.; Moore, C.H.
Biochem. Soc. Trans. 7, 721-723, 1979
A; Title: The N-terminal amino acid sequence of sheep heart phosphofructokinase.
A; Reference number: A14454; MUID: 80004524; PMID: 157899
A; Accession: A14454
```

```
A; Residues: 1-11 <FOR>
C; Keywords: glycolysis; phosphotransferase
                          18.2%; Score 2; DB 2; Length 11;
  Query Match
                          100.0%; Pred. No. 3e+04;
  Best Local Similarity
                                0; Mismatches
                                                                              0;
                                                  0; Indels
                                                                  0; Gaps
             2; Conservative
            1 AK 2
Qу
              \Box
            8 AK 9
Db
RESULT 49
A29806
acidic proline-rich protein HP43b - golden hamster (fragment)
C; Species: Mesocricetus auratus (golden hamster)
C;Date: 19-May-1989 #sequence_revision 19-May-1989 #text change 18-Jun-1993
C; Accession: A29806
R; Mehansho, H.; Ann, D.K.; Butler, L.G.; Rogler, J.; Carlson, D.M.
J. Biol. Chem. 262, 12344-12350, 1987
A; Title: Induction of proline-rich proteins in hamster salivary glands by
isoproterenol treatment and an unusual growth inhibition by tannins.
A; Reference number: A92611; MUID: 87308247; PMID: 3040740
A; Accession: A29806
A; Molecule type: protein
A; Residues: 1-11 <MEH>
  Query Match
                          18.2%; Score 2; DB 2; Length 11;
                          100.0%; Pred. No. 3e+04;
  Best Local Similarity
                                 0; Mismatches
                                                    0; Indels
                                                                      Gaps
                                                                              0;
             2; Conservative
  Matches
            9 SL 10
Qу
              11
Db
           10 SL 11
RESULT 50
PH1375
T antigen variant K-2 - mouse (fragment)
C; Species: Mus musculus (house mouse)
C; Date: 16-Jul-1999 #sequence revision 16-Jul-1999 #text change 11-May-2000
C; Accession: PH1375
R; Lill, N.L.; Judith Tevethia, M.; Hendrickson, W.G.; Tevethia, S.S.
J. Exp. Med. 176, 449-457, 1992
A; Title: Cytotoxic T lymphocytes (CTL) against a transforming gene product
select for transformed cells with point mutations within sequences encoding CTL
recognition epitopes.
A; Reference number: PH1373; MUID: 92364547; PMID: 1380062
A; Accession: PH1375
A; Status: preliminary
A; Molecule type: mRNA
A; Residues: 1-11 <LIL>
                           18.2%; Score 2; DB 2;
                                                    Length 11;
  Query Match
                          100.0%; Pred. No. 3e+04;
  Best Local Similarity
                                                                               0;
                                                    0; Indels
                                                                  0;
                                                                       Gaps
                 Conservative
                                 0; Mismatches
```

A; Molecule type: protein

```
5 KG 6
Qу
              11
            2 KG 3
Db
RESULT 51
PH1376
T antigen variant K-3 - mouse (fragment)
C; Species: Mus musculus (house mouse)
C;Date: 16-Jul-1999 #sequence_revision 16-Jul-1999 #text_change 11-May-2000
C; Accession: PH1376
R; Lill, N.L.; Judith Tevethia, M.; Hendrickson, W.G.; Tevethia, S.S.
J. Exp. Med. 176, 449-457, 1992
A; Title: Cytotoxic T lymphocytes (CTL) against a transforming gene product
select for transformed cells with point mutations within sequences encoding CTL
recognition epitopes.
A; Reference number: PH1373; MUID: 92364547; PMID: 1380062
A; Accession: PH1376
A; Status: preliminary
A; Molecule type: mRNA
A; Residues: 1-11 <LIL>
                                             DB 2; Length 11;
  Query Match
                          18.2%; Score 2;
                          100.0%; Pred. No. 3e+04;
  Best Local Similarity
                                                                      Gaps
                                                                               0;
             2; Conservative
                                 0; Mismatches
                                                    0; Indels
                                                                   0;
  Matches
            5 KG 6
Qу
              \perp
Db
            2 KG 3
RESULT 52
PT0217
T-cell receptor beta chain V-J region (4-1-E.2) - mouse (fragment)
C: Species: Mus musculus (house mouse)
C; Date: 31-Dec-1991 #sequence_revision 31-Dec-1991 #text change 30-May-1997
C; Accession: PT0217
R; Nakano, N.; Kikutani, H.; Nishimoto, H.; Kishimoto, T.
J. Exp. Med. 173, 1091-1097, 1991
A; Title: T cell receptor V gene usage of islet beta cell-reactive T cells is not
restricted in non-obese diabetic mice.
A; Reference number: PT0209; MUID: 91217621; PMID: 1902501
A; Accession: PT0217
A; Molecule type: mRNA
A; Residues: 1-11 < NAK>
C; Keywords: T-cell receptor
                           18.2%; Score 2; DB 2; Length 11;
  Query Match
                           100.0%; Pred. No. 3e+04;
  Best Local Similarity
                                                                               0;
                                                                   0; Gaps
             2; Conservative
                               0; Mismatches
                                                    0; Indels
  Matches
            3 SR 4
Qу
              3 SR 4
Db
```

```
RESULT 53
PT0218
T-cell receptor beta chain V-J region (7-10-D.3) - mouse (fragment)
C; Species: Mus musculus (house mouse)
C;Date: 31-Dec-1991 #sequence_revision 31-Dec-1991 #text_change 30-May-1997
C; Accession: PT0218
R; Nakano, N.; Kikutani, H.; Nishimoto, H.; Kishimoto, T.
J. Exp. Med. 173, 1091-1097, 1991
A; Title: T cell receptor V gene usage of islet beta cell-reactive T cells is not
restricted in non-obese diabetic mice.
A; Reference number: PT0209; MUID: 91217621; PMID: 1902501
A: Accession: PT0218
A; Molecule type: mRNA
A; Residues: 1-11 <NAK>
C; Keywords: T-cell receptor
                          18.2%; Score 2; DB 2; Length 11;
  Query Match
                          100.0%; Pred. No. 3e+04;
  Best Local Similarity
            2; Conservative
                               0; Mismatches
                                                   0; Indels
                                                                      Gaps
  Matches
            6 GN 7
Qу
              11
            7 GN 8
Dh
RESULT 54
D41946
T-cell receptor gamma chain (la.4) - mouse (fragment)
C; Species: Mus musculus (house mouse)
C;Date: 03-Feb-1994 #sequence revision 03-Feb-1994 #text change 07-May-1999
C; Accession: D41946
R; Whetsell, M.; Mosley, R.L.; Whetsell, L.; Schaefer, F.V.; Miller, K.S.; Klein,
J.R.
Mol. Cell. Biol. 11, 5902-5909, 1991
A; Title: Rearrangement and junctional-site sequence analyses of T-cell receptor
gamma genes in intestinal intraepithelial lymphocytes from murine athymic
chimeras.
A; Reference number: A41946; MUID: 92049316; PMID: 1658619
A:Accession: D41946
A; Status: preliminary; not compared with conceptual translation
A; Molecule type: DNA
A; Residues: 1-11 <WHE>
C; Keywords: T-cell receptor
                          18.2%; Score 2; DB 2; Length 11;
  Best Local Similarity 100.0%; Pred. No. 3e+04;
                                                                              0;
                                                                  0;
                                                                      Gaps
  Matches
             2; Conservative
                               0; Mismatches 0; Indels
            8 SS 9
Qy
              8 SS 9
Db
RESULT 55
B41946
T-cell receptor gamma chain (1t.57) - mouse (fragment)
C; Species: Mus musculus (house mouse)
```

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C;Date: 03-Feb-1994 #sequence revision 03-Feb-1994 #text change 07-May-1999
C:Accession: B41946
R; Whetsell, M.; Mosley, R.L.; Whetsell, L.; Schaefer, F.V.; Miller, K.S.; Klein,
Mol. Cell. Biol. 11, 5902-5909, 1991
A; Title: Rearrangement and junctional-site sequence analyses of T-cell receptor
gamma genes in intestinal intraepithelial lymphocytes from murine athymic
chimeras.
A; Reference number: A41946; MUID: 92049316; PMID: 1658619
A; Accession: B41946
A; Status: preliminary; not compared with conceptual translation
A; Molecule type: DNA
A; Residues: 1-11 <WHE>
C; Keywords: T-cell receptor
                          18.2%; Score 2; DB 2; Length 11;
  Query Match
  Best Local Similarity
                          100.0%; Pred. No. 3e+04;
  Matches
             2; Conservative
                                 0; Mismatches
                                                    0;
                                                       Indels
                                                                      Gaps
                                                                              0;
            8 SS 9
Qу
              II
Db
            8 SS 9
RESULT 56
C38887
T-cell receptor gamma chain (5a.3) - mouse (fragment)
C; Species: Mus musculus (house mouse)
C;Date: 03-Feb-1994 #sequence_revision 03-Feb-1994 #text change 07-May-1999
C; Accession: C38887
R; Whetsell, M.; Mosley, R.L.; Whetsell, L.; Schaefer, F.V.; Miller, K.S.; Klein,
J.R.
Mol. Cell. Biol. 11, 5902-5909, 1991
A; Title: Rearrangement and junctional-site sequence analyses of T-cell receptor
gamma genes in intestinal intraepithelial lymphocytes from murine athymic
chimeras.
A; Reference number: A41946; MUID: 92049316; PMID: 1658619
A; Accession: C38887
A; Status: preliminary; not compared with conceptual translation
A; Molecule type: DNA
A; Residues: 1-11 <WHE>
C; Keywords: T-cell receptor
                          18.2%; Score 2; DB 2; Length 11;
  Query Match
                          100.0%; Pred. No. 3e+04;
  Best Local Similarity
                                0; Mismatches
                                                                               0;
                                                  0; Indels
                                                                  0; Gaps
             2; Conservative
            8 SS 9
QУ
              - 1 1
            8 SS 9
RESULT 57
I41946
T-cell receptor gamma chain (5t.1) - mouse (fragment)
C; Species: Mus musculus (house mouse)
C;Date: 03-Feb-1994 #sequence revision 03-Feb-1994 #text change 07-May-1999
```

```
C; Accession: I41946
R; Whetsell, M.; Mosley, R.L.; Whetsell, L.; Schaefer, F.V.; Miller, K.S.; Klein,
J.R.
Mol. Cell. Biol. 11, 5902-5909, 1991
A; Title: Rearrangement and junctional-site sequence analyses of T-cell receptor
gamma genes in intestinal intraepithelial lymphocytes from murine athymic
chimeras.
A; Reference number: A41946; MUID: 92049316; PMID: 1658619
A:Accession: I41946
A; Status: preliminary; not compared with conceptual translation
A; Molecule type: DNA
A; Residues: 1-11 <WHE>
C; Keywords: T-cell receptor
                          18.2%; Score 2; DB 2; Length 11;
  Query Match
                          100.0%; Pred. No. 3e+04;
  Best Local Similarity
                                                    0; Indels
                                                                               0;
                                                                  0; Gaps
             2; Conservative
                                0; Mismatches
  Matches
            8 SS 9
Qy
              11
Db
            8 SS 9
RESULT 58
PD0441
translation elongation factor TU-like protein P43, mitochondrial - mouse
(fragment)
C; Species: Mus musculus (house mouse)
C;Date: 21-Aug-1998 #sequence_revision 21-Aug-1998 #text_change 21-Aug-1998
C; Accession: PD0441
R; Kawakami, T.; Uchida, T.; Sakai, T.; Kamo, M.; Morimasa, T.; Tsugita, A.
submitted to JIPID, August 1998
A; Description: Proteome analysis of mouse brain.
A; Reference number: PD0441
A; Accession: PD0441
A; Molecule type: protein
A; Residues: 1-11 <KAW>
A; Experimental source: striatum
C; Keywords: mitochondrion
                           18.2%; Score 2; DB 2; Length 11;
  Query Match
                          100.0%; Pred. No. 3e+04;
  Best Local Similarity
                                                                   0; Gaps
                                                                               0;
                                                    0; Indels
             2; Conservative
                                 0; Mismatches
  Matches
            1 AK 2
Qу
              \perp
nh
            4 AK 5
RESULT 59
T60434
68kDa neurofilament - rat (fragment)
C; Species: Rattus norvegicus (Norway rat)
C;Date: 02-Aug-1996 #sequence revision 02-Aug-1996 #text change 05-Nov-1999
C; Accession: I60434
R; Reeben, M.; Neuman, T.; Palgi, J.; Palm, K.; Paalme, V.; Saarma, M.
J. Neurosci. Res. 40, 177-188, 1995
```

```
A; Title: Characterization of the rat light neurofilament (NF-L) gene promoter
and identification of NGF and cAMP responsive regions.
A; Reference number: I60434; MUID: 95264348; PMID: 7745611
A; Accession: I60434
A; Status: preliminary; translated from GB/EMBL/DDBJ
A; Molecule type: DNA
A; Residues: 1-11 <RES>
A; Cross-references: EMBL: X53981; NID: g452676; PIDN: CAA37931.1; PID: g452677
C: Genetics:
A; Gene: NF68
                          18.2%; Score 2; DB 2; Length 11;
  Query Match
  Best Local Similarity 100.0%; Pred. No. 3e+04;
             2; Conservative 0; Mismatches
                                                  0; Indels
                                                                  0; Gaps
                                                                              0;
            8 SS 9
Qу
              1.1
            2 SS 3
Db
RESULT 60
s65377
cytochrome-c oxidase (EC 1.9.3.1) chain VIa-H, cardiac - rat (fragment)
C; Species: Rattus norvegicus (Norway rat)
C;Date: 28-Oct-1996 #sequence revision 13-Mar-1997 #text change 16-Jul-1999
C; Accession: S65377
R; Schaegger, H.; Noack, H.; Halangk, W.; Brandt, U.; von Jagow, G.
Eur. J. Biochem. 230, 235-241, 1995
A; Title: Cytochrome-c oxidase in developing rat heart. Enzymic properties and
amino-terminal sequences suggest identity of the fetal heart and the adult liver
isoform.
A; Reference number: S65372; MUID: 95324529; PMID: 7601105
A; Accession: S65377
A; Status: preliminary
A; Molecule type: protein
A; Residues: 1-11 <SCH>
C; Keywords: cardiac muscle; heart; oxidoreductase
                          18.2%; Score 2; DB 2; Length 11;
  Query Match
                          100.0%; Pred. No. 3e+04;
  Best Local Similarity
                                                                  0;
                                                                               0;
                                 0; Mismatches
                                                    0; Indels
                                                                      Gaps
            2; Conservative
  Matches
            1 AK 2
              11
            3 AK 4
RESULT 61
PH0939
T-cell receptor beta chain V-D-J region (clone 10) - rat (fragment)
C; Species: Rattus norvegicus (Norway rat)
C;Date: 09-Oct-1992 #sequence revision 09-Oct-1992 #text change 30-May-1997
C; Accession: PH0939
R;Gold, D.P.; Offner, H.; Sun, D.; Wiley, S.; Vandenbark, A.A.; Wilson, D.B.
J. Exp. Med. 174, 1467-1476, 1991
A; Title: Analysis of T cell receptor beta chains in Lewis rats with experimental
allergic encephalomyelitis: conserved complementarity determining region 3.
```

```
A; Reference number: PH0891; MUID: 92078857; PMID: 1836012
A: Accession: PH0939
A; Molecule type: mRNA
A; Residues: 1-11 <GOL>
A: Experimental source: complete Freund's adjuvant-immunized lymph node
C; Keywords: T-cell receptor
                          18.2%; Score 2; DB 2; Length 11;
  Query Match
  Best Local Similarity
                          100.0%; Pred. No. 3e+04;
                                                                              0;
  Matches
            2; Conservative
                                 0; Mismatches
                                                   0; Indels
                                                                  0; Gaps
            8 SS 9
QУ
              11
            3 SS 4
Db
RESULT 62
PH0940
T-cell receptor beta chain V-D-J region (clone 11) - rat (fragment)
C; Species: Rattus norvegicus (Norway rat)
C;Date: 09-Oct-1992 #sequence revision 09-Oct-1992 #text change 30-May-1997
C; Accession: PH0940
R; Gold, D.P.; Offner, H.; Sun, D.; Wiley, S.; Vandenbark, A.A.; Wilson, D.B.
J. Exp. Med. 174, 1467-1476, 1991
A; Title: Analysis of T cell receptor beta chains in Lewis rats with experimental
allergic encephalomyelitis: conserved complementarity determining region 3.
A; Reference number: PH0891; MUID: 92078857; PMID: 1836012
A; Accession: PH0940
A; Molecule type: mRNA
A; Residues: 1-11 <GOL>
A; Experimental source: complete Freund's adjuvant-immunized lymph node
C; Keywords: T-cell receptor
                          18.2%; Score 2; DB 2; Length 11;
  Query Match
                          100.0%; Pred. No. 3e+04;
  Best Local Similarity
                                 0; Mismatches
                                                   0; Indels
                                                                  0; Gaps
                                                                              0;
            2; Conservative
  Matches
            8 SS 9
Qy
              11
            3 SS 4
Dh
RESULT 63
PH0941
T-cell receptor beta chain V-D-J region (clone 12) - rat (fragment)
C; Species: Rattus norvegicus (Norway rat)
C;Date: 09-Oct-1992 #sequence revision 09-Oct-1992 #text change 30-May-1997
C; Accession: PH0941
R; Gold, D.P.; Offner, H.; Sun, D.; Wiley, S.; Vandenbark, A.A.; Wilson, D.B.
J. Exp. Med. 174, 1467-1476, 1991
A; Title: Analysis of T cell receptor beta chains in Lewis rats with experimental
allergic encephalomyelitis: conserved complementarity determining region 3.
A; Reference number: PH0891; MUID: 92078857; PMID: 1836012
A; Accession: PH0941
A; Molecule type: mRNA
A; Residues: 1-11 <GOL>
A; Experimental source: complete Freund's adjuvant-immunized lymph node
```

```
18.2%; Score 2; DB 2; Length 11;
  Query Match
                          100.0%; Pred. No. 3e+04;
  Best Local Similarity
                                                                              0;
                                                                 0; Gaps
            2; Conservative
                               0; Mismatches
                                                  0; Indels
            8 SS 9
Qy
              3 SS 4
Db
RESULT 64
PH0929
T-cell receptor beta chain V-D-J region (clone 15) - rat (fragment)
C; Species: Rattus norvegicus (Norway rat)
C;Date: 09-Oct-1992 #sequence revision 09-Oct-1992 #text change 30-May-1997
C; Accession: PH0929
R; Gold, D.P.; Offner, H.; Sun, D.; Wiley, S.; Vandenbark, A.A.; Wilson, D.B.
J. Exp. Med. 174, 1467-1476, 1991
A; Title: Analysis of T cell receptor beta chains in Lewis rats with experimental
allergic encephalomyelitis: conserved complementarity determining region 3.
A; Reference number: PH0891; MUID: 92078857; PMID: 1836012
A; Accession: PH0929
A; Molecule type: mRNA
A; Residues: 1-11 <GOL>
A; Experimental source: concanavalin A-activated lymphoblast
C; Keywords: T-cell receptor
                          18.2%; Score 2; DB 2; Length 11;
  Query Match
  Best Local Similarity
                          100.0%; Pred. No. 3e+04;
             2; Conservative
                                 0; Mismatches
                                                   0; Indels
                                                                  0; Gaps
                                                                              0;
            3 SR 4
Qу
              11
Db
            3 SR 4
RESULT 65
PH0891
T-cell receptor beta chain V-D-J region (clone 6-1) - rat (fragment)
C; Species: Rattus norvegicus (Norway rat)
C;Date: 09-Oct-1992 #sequence revision 09-Oct-1992 #text change 30-May-1997
C; Accession: PH0891
R;Gold, D.P.; Offner, H.; Sun, D.; Wiley, S.; Vandenbark, A.A.; Wilson, D.B.
J. Exp. Med. 174, 1467-1476, 1991
A; Title: Analysis of T cell receptor beta chains in Lewis rats with experimental
allergic encephalomyelitis: conserved complementarity determining region 3.
A; Reference number: PH0891; MUID: 92078857; PMID: 1836012
A; Accession: PH0891
A; Molecule type: mRNA
A; Residues: 1-11 <GOL>
A; Experimental source: myelin basic protein-immunized T-cell
C; Keywords: T-cell receptor
                          18.2%; Score 2; DB 2; Length 11;
  Query Match
                          100.0%; Pred. No. 3e+04;
  Best Local Similarity
                                 0; Mismatches
                                                                              0;
             2; Conservative
                                                   0; Indels
                                                                  0; Gaps
```

C; Keywords: T-cell receptor

```
8 SS 9
Qy
              11
            3 SS 4
Db
RESULT 66
PH0938
T-cell receptor beta chain V-D-J region (clone 9) - rat (fragment)
C; Species: Rattus norvegicus (Norway rat)
C;Date: 09-Oct-1992 #sequence revision 09-Oct-1992 #text change 30-May-1997
C; Accession: PH0938
R; Gold, D.P.; Offner, H.; Sun, D.; Wiley, S.; Vandenbark, A.A.; Wilson, D.B.
J. Exp. Med. 174, 1467-1476, 1991
A; Title: Analysis of T cell receptor beta chains in Lewis rats with experimental
allergic encephalomyelitis: conserved complementarity determining region 3.
A; Reference number: PH0891; MUID: 92078857; PMID: 1836012
A; Accession: PH0938
A; Molecule type: mRNA
A; Residues: 1-11 <GOL>
A; Experimental source: complete Freund's adjuvant-immunized lymph node
C; Keywords: T-cell receptor
                                  Score 2; DB 2; Length 11;
  Query Match
                          18.2%;
                          100.0%; Pred. No. 3e+04;
  Best Local Similarity
                                                                      Gaps
                                                                               0;
                                                   0; Indels
                                                                  0;
             2; Conservative
                                 0; Mismatches
  Matches
            8 SS 9
Qy
              1 i
            3 SS 4
Db
RESULT 67
PH0947
T-cell receptor beta chain V-D-J region (clone A2) - rat (fragment)
C; Species: Rattus norvegicus (Norway rat)
C;Date: 09-Oct-1992 #sequence revision 09-Oct-1992 #text change 30-May-1997
C; Accession: PH0947
R; Gold, D.P.; Offner, H.; Sun, D.; Wiley, S.; Vandenbark, A.A.; Wilson, D.B.
J. Exp. Med. 174, 1467-1476, 1991
A; Title: Analysis of T cell receptor beta chains in Lewis rats with experimental
allergic encephalomyelitis: conserved complementarity determining region 3.
A; Reference number: PH0891; MUID: 92078857; PMID: 1836012
A; Accession: PH0947
A; Molecule type: mRNA
A; Residues: 1-11 <GOL>
A; Experimental source: myelin basic protein fragment-reactive T-cell, recovered
from experimentally induced allergic encephalomyelitis
C; Keywords: T-cell receptor
                           18.2%; Score 2; DB 2; Length 11;
  Query Match
                           100.0%; Pred. No. 3e+04;
  Best Local Similarity
                                                                               0;
                                                    0; Indels
                                                                   0; Gaps
                                 0; Mismatches
             2; Conservative
  Matches
            3 SR 4
Qy
              \perp
Db
            3 SR 4
```

```
RESULT 68
PH0903
T-cell receptor beta chain V-D-J region (hybridoma S1C2A6) - rat (fragment)
C; Species: Rattus norvegicus (Norway rat)
C;Date: 09-Oct-1992 #sequence revision 09-Oct-1992 #text change 30-May-1997
C:Accession: PH0903
R;Gold, D.P.; Offner, H.; Sun, D.; Wiley, S.; Vandenbark, A.A.; Wilson, D.B.
J. Exp. Med. 174, 1467-1476, 1991
A; Title: Analysis of T cell receptor beta chains in Lewis rats with experimental
allergic encephalomyelitis: conserved complementarity determining region 3.
A: Reference number: PH0891; MUID: 92078857; PMID: 1836012
A; Accession: PH0903
A; Molecule type: mRNA
A; Residues: 1-11 <GOL>
A; Experimental source: myelin basic protein-immunized T-cell
C; Keywords: T-cell receptor
                          18.2%; Score 2; DB 2; Length 11;
  Query Match
                          100.0%; Pred. No. 3e+04;
  Best Local Similarity
                                                                              0;
                                                                      Gaps
  Matches
             2; Conservative
                                0; Mismatches
                                                   0; Indels
                                                                  0;
            8 SS 9
Qу
              11
            3 SS 4
Db
RESULT 69
PH0904
T-cell receptor beta chain V-D-J region (hybridoma S22C2) - rat (fragment)
C; Species: Rattus norvegicus (Norway rat)
C;Date: 09-Oct-1992 #sequence revision 09-Oct-1992 #text change 30-May-1997
C; Accession: PH0904
R;Gold, D.P.; Offner, H.; Sun, D.; Wiley, S.; Vandenbark, A.A.; Wilson, D.B.
J. Exp. Med. 174, 1467-1476, 1991
A; Title: Analysis of T cell receptor beta chains in Lewis rats with experimental
allergic encephalomyelitis: conserved complementarity determining region 3.
A; Reference number: PH0891; MUID: 92078857; PMID: 1836012
A; Accession: PH0904
A; Molecule type: mRNA
A; Residues: 1-11 <GOL>
A; Experimental source: myelin basic protein-immunized T-cell
C; Keywords: T-cell receptor
                          18.2%; Score 2; DB 2; Length 11;
  Query Match
                          100.0%; Pred. No. 3e+04;
  Best Local Similarity
                                                                              0;
                                                    0; Indels
                                                                  0; Gaps
                                  0; Mismatches
             2; Conservative
  Matches
            8 SS 9
Qу
              11
            3 SS 4
RESULT 70
PH0924
T-cell receptor beta chain V-D-J region (isolate 10) - rat (fragment)
```

```
C; Species: Rattus norvegicus (Norway rat)
C;Date: 09-Oct-1992 #sequence revision 09-Oct-1992 #text change 30-May-1997
C; Accession: PH0924
R;Gold, D.P.; Offner, H.; Sun, D.; Wiley, S.; Vandenbark, A.A.; Wilson, D.B.
J. Exp. Med. 174, 1467-1476, 1991
A; Title: Analysis of T cell receptor beta chains in Lewis rats with experimental
allergic encephalomyelitis: conserved complementarity determining region 3.
A; Reference number: PH0891; MUID: 92078857; PMID: 1836012
A; Accession: PH0924
A; Molecule type: mRNA
A: Residues: 1-11 <GOL>
A; Experimental source: concanavalin A-activated lymphoblast
C: Keywords: T-cell receptor
                          18.2%; Score 2; DB 2; Length 11;
  Query Match
                          100.0%; Pred. No. 3e+04;
  Best Local Similarity
                                                    0; Indels
                                                                  0; Gaps
             2; Conservative
                              0; Mismatches
  Matches
            8 SS 9
Qy
              11
Db
            3 SS 4
RESULT 71
PH0919
T-cell receptor beta chain V-D-J region (isolate 5) - rat (fragment)
C; Species: Rattus norvegicus (Norway rat)
C;Date: 09-Oct-1992 #sequence_revision 09-Oct-1992 #text_change 30-May-1997
C; Accession: PH0919
R;Gold, D.P.; Offner, H.; Sun, D.; Wiley, S.; Vandenbark, A.A.; Wilson, D.B.
J. Exp. Med. 174, 1467-1476, 1991
A; Title: Analysis of T cell receptor beta chains in Lewis rats with experimental
allergic encephalomyelitis: conserved complementarity determining region 3.
A; Reference number: PH0891; MUID: 92078857; PMID: 1836012
A; Accession: PH0919
A; Molecule type: mRNA
A; Residues: 1-11 <GOL>
A; Experimental source: concanavalin A-activated lymphoblast
A; Note: the authors translated the codon CAG for residue 11 as Glu
C; Keywords: T-cell receptor
                          18.2%; Score 2; DB 2; Length 11;
  Ouery Match
                          100.0%; Pred. No. 3e+04;
  Best Local Similarity
                                 0; Mismatches
                                                                               0;
             2; Conservative
                                                    0; Indels
                                                                  0; Gaps
  Matches
            3 SR 4
Qy
              11
            3 SR 4
Db
RESULT 72
PH0914
T-cell receptor beta chain V-D-J region (isolate 7) - rat (fragment)
C; Species: Rattus norvegicus (Norway rat)
C;Date: 09-Oct-1992 #sequence_revision 09-Oct-1992 #text_change 30-May-1997
C; Accession: PH0914
R; Gold, D.P.; Offner, H.; Sun, D.; Wiley, S.; Vandenbark, A.A.; Wilson, D.B.
```

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J. Exp. Med. 174, 1467-1476, 1991
A; Title: Analysis of T cell receptor beta chains in Lewis rats with experimental
allergic encephalomyelitis: conserved complementarity determining region 3.
A; Reference number: PH0891; MUID: 92078857; PMID: 1836012
A; Accession: PH0914
A; Molecule type: mRNA
A; Residues: 1-11 <GOL>
A; Experimental source: myelin basic protein-immunized lymph node
C; Keywords: T-cell receptor
                          18.2%; Score 2; DB 2;
                                                    Length 11;
  Query Match
  Best Local Similarity
                          100.0%; Pred. No. 3e+04;
                                                    0; Indels
                                                                  0; Gaps
                                                                              0;
                                0; Mismatches
  Matches
             2; Conservative
            8 SS 9
Qу
              +
Db
            3 SS 4
RESULT 73
PH0922
T-cell receptor beta chain V-D-J region (isolate 8) - rat (fragment)
C; Species: Rattus norvegicus (Norway rat)
C;Date: 09-Oct-1992 #sequence_revision 09-Oct-1992 #text_change 30-May-1997
C; Accession: PH0922
R;Gold, D.P.; Offner, H.; Sun, D.; Wiley, S.; Vandenbark, A.A.; Wilson, D.B.
J. Exp. Med. 174, 1467-1476, 1991
A; Title: Analysis of T cell receptor beta chains in Lewis rats with experimental
allergic encephalomyelitis: conserved complementarity determining region 3.
A; Reference number: PH0891; MUID: 92078857; PMID: 1836012
A; Accession: PH0922
A; Molecule type: mRNA
A; Residues: 1-11 <GOL>
A; Experimental source: concanavalin A-activated lymphoblast
C; Keywords: T-cell receptor
                          18.2%; Score 2; DB 2; Length 11;
  Query Match
                          100.0%; Pred. No. 3e+04;
  Best Local Similarity
                                                                  0; Gaps
                                                                               0;
                               0; Mismatches
                                                   0; Indels
  Matches
             2; Conservative
            8 SS 9
Qу
              3 SS 4
Db
RESULT 74
PH0906
T-cell receptor beta chain V-D-J region (isolates 2, 8, 9) - rat (fragment)
C; Species: Rattus norvegicus (Norway rat)
C;Date: 09-Oct-1992 #sequence revision 09-Oct-1992 #text change 30-May-1997
C; Accession: PH0906
R; Gold, D.P.; Offner, H.; Sun, D.; Wiley, S.; Vandenbark, A.A.; Wilson, D.B.
J. Exp. Med. 174, 1467-1476, 1991
A; Title: Analysis of T cell receptor beta chains in Lewis rats with experimental
allergic encephalomyelitis: conserved complementarity determining region 3.
A; Reference number: PH0891; MUID: 92078857; PMID: 1836012
A; Accession: PH0906
```

```
A; Molecule type: mRNA
A; Residues: 1-11 <GOL>
A; Experimental source: myelin basic protein-immunized lymph node
C; Keywords: T-cell receptor
                          18.2%; Score 2; DB 2; Length 11;
  Query Match
  Best Local Similarity
                          100.0%; Pred. No. 3e+04;
                                                                              0;
                                                                     Gaps
            2; Conservative
                               0; Mismatches
                                                  0; Indels
                                                                 0;
  Matches
            8 SS 9
Qу
              3 SS 4
RESULT 75
A34243
H-hyosophorin - Japanese flounder (fragment)
C; Species: Paralichthys olivaceus (Japanese flounder)
C;Date: 07-Sep-1990 #sequence revision 07-Sep-1990 #text_change 12-Feb-1999
C; Accession: A34243
R; Seko, A.; Kitajima, K.; Iwasaki, M.; Inoue, S.; Inoue, Y.
J. Biol. Chem. 264, 15922-15929, 1989
A; Title: Structural studies of fertilization-associated carbohydrate-rich
glycoproteins (Hyosophorin) isolated from the fertilized and unfertilized eggs
of flounder, Paralichthys olivaceus. Presence of a novel penta-antennary N-
linkedglycan chain in the tandem repeating glycopeptide unit of hyosophorin.
A; Reference number: A34243; MUID: 89380184; PMID: 2777771
A; Accession: A34243
A; Molecule type: protein
A; Residues: 1-11 <SEK>
A; Note: 3-Ala, 4-Ala, 5-Pro or Gln, and 6-Val were also found
                          18.2%; Score 2; DB 2; Length 11;
  Query Match
  Best Local Similarity
                          100.0%; Pred. No. 3e+04;
                                                                              0;
                               0; Mismatches
                                                       Indels
                                                                  0; Gaps
            2; Conservative
                                                   0;
  Matches
            6 GN 7
Qy
             - 11
Db
            6 GN 7
```

Search completed: April 8, 2004, 15:49:28

Job time: 8.61538 secs

## GenCore version 5.1.6 Copyright (c) 1993 - 2004 Compugen Ltd.

OM protein - protein search, using sw model

Run on: April 8, 2004, 15:47:33; Search time 30.3077 Seconds

(without alignments)

95.432 Million cell updates/sec

Title: US-09-787-443A-21

Perfect score: 11

Sequence: 1 AKSRKGNSSLM 11

Scoring table: OLIGO

Gapop 60.0 , Gapext 60.0

Searched: 1073127 segs, 262937947 residues

Word size :

Total number of hits satisfying chosen parameters: 9223

Minimum DB seq length: 11 Maximum DB seq length: 11

Post-processing: Listing first 100 summaries

Database: Published Applications AA:\*

1: /cgn2\_6/ptodata/1/pubpaa/US07\_PUBCOMB.pep:\*

2: /cgn2 6/ptodata/1/pubpaa/PCT NEW PUB.pep:\*

3: /cgn2\_6/ptodata/1/pubpaa/US06\_NEW\_PUB.pep:\*

4: /cgn2\_6/ptodata/1/pubpaa/US06\_PUBCOMB.pep:\*

5: /cgn2 6/ptodata/1/pubpaa/US07 NEW PUB.pep:\*

6: /cgn2 6/ptodata/1/pubpaa/PCTUS PUBCOMB.pep:\*

7: /cgn2\_6/ptodata/1/pubpaa/US08 NEW PUB.pep:\*

8: /cgn2 6/ptodata/1/pubpaa/US08\_PUBCOMB.pep:\*

9: /cgn2 6/ptodata/1/pubpaa/US09A PUBCOMB.pep:\*

10: /cqn2 6/ptodata/1/pubpaa/US09B PUBCOMB.pep:\*

11: /cgn2 6/ptodata/1/pubpaa/US09C PUBCOMB.pep:\*

12: /cgn2 6/ptodata/1/pubpaa/US09 NEW PUB.pep:\*

13: /cgn2 6/ptodata/1/pubpaa/US10A PUBCOMB.pep:\*

14: /cgn2 6/ptodata/1/pubpaa/US10B PUBCOMB.pep:\*

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16: /cgn2\_6/ptodata/1/pubpaa/US10\_NEW\_PUB.pep:\*

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18: /cgn2 6/ptodata/1/pubpaa/US60 PUBCOMB.pep:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

## SUMMARIES

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## ALIGNMENTS

## RESULT 1

US-09-876-904A-83

- ; Sequence 83, Application US/09876904A
- ; Publication No. US20030072794A1
- ; GENERAL INFORMATION:
- ; APPLICANT: BOULIKAS, TENI
- ; TITLE OF INVENTION: ENCAPSULATION OF PLASMID DNA (LIPOGENES TM) AND THERAPEUTIC

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PEPTIDE
 TITLE OF INVENTION: CONJUGATES INTO TARGETED LIPOSOME COMPLEXES
 FILE REFERENCE: TB-2002.00
 CURRENT APPLICATION NUMBER: US/09/876,904A
; CURRENT FILING DATE: 2001-06-08
; PRIOR APPLICATION NUMBER: US 60/210,925
 PRIOR FILING DATE: 2000-06-09
; NUMBER OF SEQ ID NOS: 629
 SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 83
   LENGTH: 11
   TYPE: PRT
   ORGANISM: Artificial Sequence
   OTHER INFORMATION: Description of Artificial Sequence: Synthetic T-DNA-
linked VirD2
  OTHER INFORMATION: endonuclease of the Agrobacterium tumefaciens tumor-
inducing
; OTHER INFORMATION: plasmid
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US-10-211-088-246
; Sequence 246, Application US/10211088
; Publication No. US20030104479A1
; GENERAL INFORMATION:
; APPLICANT: Bright, Gary R.
; APPLICANT: Premkumar, D. David
; APPLICANT: Chen, Yih-Tai
; TITLE OF INVENTION: No. US20030104479A1el Fusion Proteins And Assays For
Molecular Binding
; FILE REFERENCE: 01-1022-US
; CURRENT APPLICATION NUMBER: US/10/211,088
  CURRENT FILING DATE: 2002-10-15
  PRIOR APPLICATION NUMBER: 60/309,395
; PRIOR FILING DATE: 2001-08-01
; PRIOR APPLICATION NUMBER: 60/341,589
; PRIOR FILING DATE: 2001-12-13
; NUMBER OF SEQ ID NOS: 366
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; SEQ ID NO 246
   LENGTH: 11
   TYPE: PRT
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   FEATURE:
   OTHER INFORMATION: Nuclear localization signal
US-10-211-088-246
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TITLE OF INVENTION: AGENTS WITH NUCLEAR LOCALIZATION SIGNAL/FUSOGENIC

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; Sequence 43, Application US/08779457
; Publication No. US20020193571A1
  GENERAL INFORMATION:
    APPLICANT: Carter, Paul J.
    APPLICANT: Chiang, Nancy Y.
    APPLICANT: Kyung, Jin Kim
    APPLICANT: Matthews, William APPLICANT: Rodrigues, Maria L.
    TITLE OF INVENTION: WSX RECEPTOR AGONIST ANTIBODIES
    NUMBER OF SEQUENCES: 51
    CORRESPONDENCE ADDRESS:
      ADDRESSEE: Genentech, Inc.
      STREET: 460 Point San Bruno Blvd
      CITY: South San Francisco
      STATE: California
      COUNTRY: USA
      ZIP: 94080
ï
    COMPUTER READABLE FORM:
      MEDIUM TYPE: 3.5 inch, 1.44 Mb floppy disk
      COMPUTER: IBM PC compatible
      OPERATING SYSTEM: PC-DOS/MS-DOS
      SOFTWARE: WinPatin (Genentech)
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      APPLICATION NUMBER: US/08/779,457
      FILING DATE:
      CLASSIFICATION: 435
    PRIOR APPLICATION DATA:
      APPLICATION NUMBER: 08/667197
      FILING DATE: 06/20/96
    PRIOR APPLICATION DATA:
      APPLICATION NUMBER: 08/585005
      FILING DATE: 01/08/96
    ATTORNEY/AGENT INFORMATION:
      NAME: Lee, Wendy M.
;
      REGISTRATION NUMBER: 40,378
      REFERENCE/DOCKET NUMBER: P0986P2
    TELECOMMUNICATION INFORMATION:
      TELEPHONE: 415/225-1994
      TELEFAX: 415/952-9881
      TELEX: 910/371-7168
  INFORMATION FOR SEQ ID NO:
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    SEQUENCE CHARACTERISTICS:
      LENGTH: 11 amino acids
      TYPE: Amino Acid
      TOPOLOGY: Linear
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; Patent No. US20020009752A1
; GENERAL INFORMATION:
 APPLICANT: Burke, James
  APPLICANT: Strittmater, Warren
  APPLICANT: Nagai, Yoshitaka
  TITLE OF INVENTION: COMPOUNDS THAT SELECTIVELY BIND TO EXPANDED POLYGLUTAMINE
REPEAT DOMAINS
; TITLE OF INVENTION: AND METHODS OF USE THEREOF
  FILE REFERENCE: 5405.242
  CURRENT APPLICATION NUMBER: US/09/780,070
  CURRENT FILING DATE: 2001-02-09
  PRIOR APPLICATION NUMBER: 60/189,781
  PRIOR FILING DATE: 2000-03-16
  NUMBER OF SEQ ID NOS: 40
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; Patent No. US20020009752A1
; GENERAL INFORMATION:
; APPLICANT: Burke, James
 APPLICANT: Strittmater, Warren
; APPLICANT: Nagai, Yoshitaka
  TITLE OF INVENTION: COMPOUNDS THAT SELECTIVELY BIND TO EXPANDED POLYGLUTAMINE
REPEAT DOMAINS
; TITLE OF INVENTION: AND METHODS OF USE THEREOF
; FILE REFERENCE: 5405.242
; CURRENT APPLICATION NUMBER: US/09/780,070
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 PRIOR APPLICATION NUMBER: 60/189,781
 PRIOR FILING DATE: 2000-03-16
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; Sequence 18, Application US/09823649A
; Patent No. US20020012970A1
; GENERAL INFORMATION:
 APPLICANT: Smith, Edward
  APPLICANT: Elfstrom, Carita
  APPLICANT: Gelfand, David
; APPLICANT: Higuchi, Russell
 APPLICANT: Myers, Thomas
; APPLICANT: Schoenbrunner, Nancy
; APPLICANT: Wang, Alice
 TITLE OF INVENTION: HIGH TEMPERATURE REVERSE TRANSCRIPTION USING MUTANT DNA
POLYMERASES
; FILE REFERENCE: RPA1006
  CURRENT APPLICATION NUMBER: US/09/823,649A
  CURRENT FILING DATE: 2001-03-30
; PRIOR APPLICATION NUMBER: US 60/198,336
; PRIOR FILING DATE: 2000-04-18
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; Patent No. US20020032315A1
  GENERAL INFORMATION:
    APPLICANT: Baca, Manuel
    APPLICANT: Wells, James A.
    APPLICANT: Presta, Leonard G.
    APPLICANT: Lowman, Henry B.
    APPLICANT: Chen, Yvonne M.
    TITLE OF INVENTION: ANTI-VEGF ANTIBODIES
    NUMBER OF SEQUENCES: 131
    CORRESPONDENCE ADDRESS:
      ADDRESSEE: Genentech, Inc.
      STREET: 1 DNA Way
;
      CITY: South San Francisco
      STATE: California
      COUNTRY: USA
      ZIP: 94080
    COMPUTER READABLE FORM:
      MEDIUM TYPE: 3.5 inch, 1.44 Mb floppy disk
      COMPUTER: IBM PC compatible
      OPERATING SYSTEM: PC-DOS/MS-DOS
      SOFTWARE: WinPatin (Genentech)
    CURRENT APPLICATION DATA:
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      APPLICATION NUMBER: US/09/056,160B
      FILING DATE: 06-Apr-1998
;
      CLASSIFICATION: 424
;
    PRIOR APPLICATION DATA:
      APPLICATION NUMBER: 60/054,856
      FILING DATE: 06-AUG-1997
    ATTORNEY/AGENT INFORMATION:
      NAME: Hasak, Janet E.
      REGISTRATION NUMBER: 28,616
      REFERENCE/DOCKET NUMBER: P1093R2
    TELECOMMUNICATION INFORMATION:
      TELEPHONE: 650/225-1896
      TELEFAX: 650/952-9881
  INFORMATION FOR SEQ ID NO: 17:
    SEQUENCE CHARACTERISTICS:
      LENGTH: 11 amino acids
      TYPE: Amino Acid
      TOPOLOGY: Linear
US-09-056-160B-17
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; Sequence 11, Application US/09896251
; Patent No. US20020041880A1
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; GENERAL INFORMATION:
 APPLICANT: Merck & Co., Inc.
  APPLICANT: DeFeo-Jones, Deborah
  APPLICANT: Heimbrook, David C.
  APPLICANT: Jones, Raymond E.
  TITLE OF INVENTION: A METHOD OF TREATING CANCER
  FILE REFERENCE: 20662
  CURRENT APPLICATION NUMBER: US/09/896,251
  CURRENT FILING DATE: 2001-06-29
  PRIOR APPLICATION NUMBER: 60/215,934
  PRIOR FILING DATE: 2000-07-05
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US-09-896-251-18
; Sequence 18, Application US/09896251
; Patent No. US20020041880A1
; GENERAL INFORMATION:
 APPLICANT: Merck & Co., Inc.
 APPLICANT: DeFeo-Jones, Deborah
  APPLICANT: Heimbrook, David C.
  APPLICANT: Jones, Raymond E.
  TITLE OF INVENTION: A METHOD OF TREATING CANCER
  FILE REFERENCE: 20662
  CURRENT APPLICATION NUMBER: US/09/896,251
  CURRENT FILING DATE: 2001-06-29
  PRIOR APPLICATION NUMBER: 60/215,934
 PRIOR FILING DATE: 2000-07-05
 NUMBER OF SEQ ID NOS: 54
  SOFTWARE: FastSEQ for Windows Version 4.0
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   OTHER INFORMATION: completely synthetic amino acid sequence
   NAME/KEY: AMIDATION
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                               0; Mismatches
          3; Conservative
                                                0; Indels
                                                                0; Gaps
                                                                            0;
            8 SSL 10
Qу
             111
            9 SSL 11
Db
RESULT 10
US-09-896-245-11
; Sequence 11, Application US/09896245
; Patent No. US20020042375A1
; GENERAL INFORMATION:
  APPLICANT: Merck & Co., Inc.
  APPLICANT: Heimbrook, David C.
; APPLICANT: Yao, Siu-Long
  TITLE OF INVENTION: A METHOD OF TREATING CANCER
; FILE REFERENCE: 20664Y
  CURRENT APPLICATION NUMBER: US/09/896,245
  CURRENT FILING DATE: 2001-06-29
  PRIOR APPLICATION NUMBER: 60/216,217
  PRIOR FILING DATE: 2000-07-05
  NUMBER OF SEQ ID NOS: 54
  SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 11
   LENGTH: 11
   TYPE: PRT
   ORGANISM: Artificial Sequence
   FEATURE:
   OTHER INFORMATION: completely synthetic amino acid sequence
   NAME/KEY: ACETYLATION
   LOCATION: (1)...(1)
   OTHER INFORMATION: acetylated N-terminus amino acid
US-09-896-245-11
  Query Match
                         27.3%; Score 3; DB 9; Length 11;
  Best Local Similarity 100.0%; Pred. No. 1.1e+04;
 Matches
           3; Conservative
                               0; Mismatches
                                                  0; Indels
                                                                0; Gaps
                                                                            0;
Qу
            8 SSL 10
             111
           9 SSL 11
Db
RESULT 11
US-09-896-245-18
; Sequence 18, Application US/09896245
; Patent No. US20020042375A1
; GENERAL INFORMATION:
; APPLICANT: Merck & Co., Inc.
; APPLICANT: Heimbrook, David C.
; APPLICANT: Yao, Siu-Long
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LOCATION: (11)...(11)

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FILE REFERENCE: 20664Y
   CURRENT APPLICATION NUMBER: US/09/896,245
   CURRENT FILING DATE: 2001-06-29
   PRIOR APPLICATION NUMBER: 60/216,217
   PRIOR FILING DATE: 2000-07-05
   NUMBER OF SEQ ID NOS: 54
   SOFTWARE: FastSEQ for Windows Version 4.0
 SEQ ID NO 18
    LENGTH: 11
    TYPE: PRT
    ORGANISM: Artificial Sequence
   FEATURE:
   OTHER INFORMATION: completely synthetic amino acid sequence
   NAME/KEY: AMIDATION
    LOCATION: (11)...(11)
    OTHER INFORMATION: leucinamide
US-09-896-245-18
  Query Match
                          27.3%; Score 3; DB 9; Length 11;
  Best Local Similarity
                          100.0%; Pred. No. 1.1e+04;
  Matches
            3; Conservative
                                 0; Mismatches
                                                   0;
                                                      Indels
                                                                     Gaps
                                                                             0;
            8 SSL 10
Qу
              IIII
            9 SSL 11
RESULT 12
US-09-935-682-28
; Sequence 28, Application US/09935682
; Patent No. US20020059032A1
; GENERAL INFORMATION:
; APPLICANT: Societe de Conseils de Recherches et D'Applications Scientifiques
  APPLICANT: Ferrer, Camara Y.
  TITLE OF INVENTION: Rational Selection of Putative Peptides from Identified
Nucleotide or
  TITLE OF INVENTION: Peptide Sequences
   FILE REFERENCE: 58767.000005
  CURRENT APPLICATION NUMBER: US/09/935,682
  CURRENT FILING DATE: 2001-08-24
  PRIOR APPLICATION NUMBER: 09/257,525
  PRIOR FILING DATE: 1999-02-25
   PRIOR APPLICATION NUMBER: PCT/FR00/00460
   PRIOR FILING DATE: 2000-02-24
  NUMBER OF SEQ ID NOS: 73
  SOFTWARE: PatentIn version 3.1
; SEQ ID NO 28
   LENGTH: 11
    TYPE: PRT
   ORGANISM: Homo sapiens
US-09-935-682-28
  Query Match
                          27.3%; Score 3; DB 9; Length 11;
  Best Local Similarity
                          100.0%; Pred. No. 1.1e+04;
 Matches
             3;
                Conservative
                                0; Mismatches
                                                   0; Indels
                                                                 0; Gaps
                                                                             0;
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TITLE OF INVENTION: A METHOD OF TREATING CANCER

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9 SLM 11
Qу
             111
Db
           2 SLM 4
RESULT 13
US-09-873-637-13
; Sequence 13, Application US/09873637
; Patent No. US20020061543A1
; GENERAL INFORMATION:
; APPLICANT: Ross, Jeffrey
  TITLE OF INVENTION: THE C-MYC CODING REGION DETERMINANT-BINDING PROTEIN
  TITLE OF INVENTION: (CRD-BP) AND ITS NUCLEIC ACID SEQUENCE
; FILE REFERENCE: 960296.95131
; CURRENT APPLICATION NUMBER: US/09/873,637
; CURRENT FILING DATE: 2001-06-04
; NUMBER OF SEQ ID NOS: 46
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 13
   LENGTH: 11
   TYPE: PRT
  ORGANISM: Homo sapiens
US-09-873-637-13
 Query Match
                         27.3%; Score 3; DB 9; Length 11;
 Best Local Similarity 100.0%; Pred. No. 1.1e+04;
 Matches 3; Conservative 0; Mismatches 0; Indels
                                                             0; Gaps
                                                                            0;
           8 SSL 10
            111
Db
           3 SSL 5
RESULT 14
US-09-825-584-1
; Sequence 1, Application US/09825584
; Patent No. US20020064805A1
   GENERAL INFORMATION:
        APPLICANT: Akita, Robert
                   Sliwkowski, Mark
        TITLE OF INVENTION: ErbB3 Antibodies
        NUMBER OF SEQUENCES: 5
        CORRESPONDENCE ADDRESS:
             ADDRESSEE: Genentech, Inc.
             STREET: 1 DNA Way
             CITY: South San Francisco
             STATE: California
             COUNTRY: USA
             ZIP: 94080
        COMPUTER READABLE FORM:
             MEDIUM TYPE: 3.5 inch, 1.44 Mb floppy disk
             COMPUTER: IBM PC compatible
             OPERATING SYSTEM: PC-DOS/MS-DOS
             SOFTWARE: WinPatin (Genentech)
        CURRENT APPLICATION DATA:
             APPLICATION NUMBER: US/09/825,584
             FILING DATE: 04-Apr-2001
```

```
CLASSIFICATION: <Unknown>
        PRIOR APPLICATION DATA:
             APPLICATION NUMBER: 08/827,009
             FILING DATE: <Unknown>
        ATTORNEY/AGENT INFORMATION:
             NAME: Lee, Wendy M.
             REGISTRATION NUMBER: 40,378
             REFERENCE/DOCKET NUMBER: P1003R1
        TELECOMMUNICATION INFORMATION:
             TELEPHONE: 650/225-1994
             TELEFAX: 650/952-9881
    INFORMATION FOR SEQ ID NO: 1:
        SEQUENCE CHARACTERISTICS:
             LENGTH: 11 amino acids
             TYPE: Amino Acid
             TOPOLOGY: Linear
        SEQUENCE DESCRIPTION: SEQ ID NO: 1:
US-09-825-584-1
                         27.3%; Score 3; DB 9; Length 11;
  Query Match
  Best Local Similarity 100.0%; Pred. No. 1.1e+04;
 Matches 3; Conservative 0; Mismatches 0; Indels
                                                               0; Gaps
           7 NSS 9 .
Qу
             3 NSS 5
Db
RESULT 15
US-09-192-854-170
; Sequence 170, Application US/09192854
; Patent No. US20020068276A1
; GENERAL INFORMATION:
; APPLICANT: Winter, Greg
  APPLICANT: Tomlinson, Ian
  TITLE OF INVENTION: Methods for Selecting Functional Peptides
  FILE REFERENCE: 3789/72916
  CURRENT APPLICATION NUMBER: US/09/192,854
; CURRENT FILING DATE: 1998-11-17
; EARLIER APPLICATION NUMBER: 60/066,729
; EARLIER FILING DATE: 1997-11-21
; NUMBER OF SEQ ID NOS: 212
  SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 170
   LENGTH: 11
   TYPE: PRT
   ORGANISM: Homo sapiens
US-09-192-854-170
                         27.3%; Score 3; DB 9; Length 11;
  Query Match
  Best Local Similarity 100.0%; Pred. No. 1.1e+04;
          3; Conservative 0; Mismatches 0; Indels 0; Gaps
                                                                           0;
           8 SSL 10
Qу
             111
Db
           8 SSL 10
```

```
RESULT 16
US-09-811-384-8
; Sequence 8, Application US/09811384
; Patent No. US20020081294A1
    GENERAL INFORMATION:
        APPLICANT: Bednar, Martin M.
                    Thomas, G. Roger
                    Gross, Cordell E.
         TITLE OF INVENTION: ANTI-CD18 ANTIBODIES IN STROKE
         NUMBER OF SEQUENCES: 15
         CORRESPONDENCE ADDRESS:
             ADDRESSEE: Genentech, Inc.
              STREET: 1 DNA Way
             CITY: South San Francisco
              STATE: California
              COUNTRY: USA
              ZIP: 94080
         COMPUTER READABLE FORM:
             MEDIUM TYPE: 3.5 inch, 1.44 Mb floppy disk
             COMPUTER: IBM PC compatible
             OPERATING SYSTEM: PC-DOS/MS-DOS
              SOFTWARE: WinPatin (Genentech)
         CURRENT APPLICATION DATA:
             APPLICATION NUMBER: US/09/811,384
              FILING DATE: 20-Dec-2000
             CLASSIFICATION: <Unknown>
         PRIOR APPLICATION DATA:
             APPLICATION NUMBER: 09/251652
             FILING DATE: 17-FEB-2000
             APPLICATION NUMBER: 08/788800
             FILING DATE: 22-JAN-1997
             APPLICATION NUMBER: 60/093038
             FILING DATE: 23-JAN-1996
        ATTORNEY/AGENT INFORMATION:
             NAME: Love, Richard B.
              REGISTRATION NUMBER: 34,659
             REFERENCE/DOCKET NUMBER: P1729C1
         TELECOMMUNICATION INFORMATION:
             TELEPHONE: 650/225-5530
             TELEFAX: 650/952-9881
    INFORMATION FOR SEQ ID NO: 8:
        SEQUENCE CHARACTERISTICS:
             LENGTH: 11 amino acids
              TYPE: Amino Acid
             TOPOLOGY: Linear
         SEQUENCE DESCRIPTION: SEQ ID NO: 8:
US-09-811-384-8
 Query Match
                          27.3%; Score 3; DB 9; Length 11;
 Best Local Similarity 100.0%; Pred. No. 1.1e+04;
 Matches 3; Conservative 0; Mismatches 0; Indels
                                                                 0; Gaps
Qу
           7 NSS 9
             -111
Db
           3 NSS 5
```

```
RESULT 17
US-09-832-723-35
; Sequence 35, Application US/09832723
; Patent No. US20020098524A1
; GENERAL INFORMATION:
 APPLICANT: Estell, David A.
 APPLICANT: Chen, Yiyou
  APPLICANT: Murray, Christopher J.
  APPLICANT: Tijerina, Pilar
  TITLE OF INVENTION: METHODS FOR SELECTIVE TARGETING
  FILE REFERENCE: GC617-2
  CURRENT APPLICATION NUMBER: US/09/832,723
  CURRENT FILING DATE: 2001-04-11
  PRIOR APPLICATION NUMBER: US 60/197,259
  PRIOR FILING DATE: 2000-04-14
  NUMBER OF SEQ ID NOS: 117
  SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 35
   LENGTH: 11
   TYPE: PRT
   ORGANISM: Artificial Sequence
   OTHER INFORMATION: peptides screened from a phage display random
   OTHER INFORMATION: peptide library
US-09-832-723-35
 Query Match
                         27.3%; Score 3; DB 9; Length 11;
 Best Local Similarity 100.0%; Pred. No. 1.1e+04;
                              0; Mismatches 0; Indels
 Matches 3; Conservative
                                                                0; Gaps
                                                                            0;
           9 SLM 11
Qy
             -1.11
           5 SLM 7
Db
RESULT 18
US-09-226-248B-27
; Sequence 27, Application US/09226248B
; Patent No. US20020106690A1
; GENERAL INFORMATION:
 APPLICANT: LEBERER, Ekkehard
  APPLICANT: LEEUW, Thomas
  APPLICANT: WHITEWAY, Malcolm
  APPLICANT: THOMAS, David Y.
  TITLE OF INVENTION: THE G-PROTEIN BETA SUBUNIT INTERACTION DOMAIN OF
  TITLE OF INVENTION: STE20P/PAK FAMILY OF PROTEIN KINASES AND USES THEREOF
  TITLE OF INVENTION: IN BIOASSAYS
  FILE REFERENCE: 00122199
  CURRENT APPLICATION NUMBER: US/09/226,248B
  CURRENT FILING DATE: 1999-01-07
  NUMBER OF SEQ ID NOS: 31
  SOFTWARE: PatentIn Ver. 2.1
;
; SEQ ID NO 27
   LENGTH: 11
   TYPE: PRT
   ORGANISM: Artificial Sequence
```

```
FEATURE:
    OTHER INFORMATION: Description of Artificial Sequence: consensus
    OTHER INFORMATION: sequence
    NAME/KEY: VARIANT
    LOCATION: (4)
    OTHER INFORMATION: Xaa = A, I, L, M, S, T
    NAME/KEY: VARIANT
   LOCATION: (7)
    OTHER INFORMATION: Xaa = I, V
   NAME/KEY: VARIANT
    LOCATION: (8)
    OTHER INFORMATION: Xaa = any amino acid
   NAME/KEY: VARIANT
   LOCATION: (9)..(10)
    OTHER INFORMATION: Xaa = A, I, L, M, S, T
US-09-226-248B-27
                         27.3%; Score 3; DB 9; Length 11;
  Query Match
  Best Local Similarity
                         100.0%; Pred. No. 1.1e+04;
 Matches
           3; Conservative 0; Mismatches 0;
                                                     Indels
                                                                0; Gaps
                                                                            0;
           8 SSL 10
             -111
           1 SSL 3
RESULT 19
US-09-966-871-31
; Sequence 31, Application US/09966871
; Patent No. US20020127539A1
; GENERAL INFORMATION:
 APPLICANT: Kopin, Alan S.
  TITLE OF INVENTION: Assays for Identifying Receptors Having
  TITLE OF INVENTION: Alterations in Signaling
  FILE REFERENCE: 00398/512002
  CURRENT APPLICATION NUMBER: US/09/966,871
  CURRENT FILING DATE: 2001-09-28
  PRIOR APPLICATION NUMBER: US 60/236,302
;
 PRIOR FILING DATE: 2000-09-28
 PRIOR APPLICATION NUMBER: US 60/288,644
  PRIOR FILING DATE: 2001-05-03
 NUMBER OF SEQ ID NOS: 87
  SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 31
   LENGTH: 11
   TYPE: PRT
    ORGANISM: Homo sapiens
US-09-966-871-31
 Query Match
                         27.3%; Score 3; DB 9; Length 11;
 Best Local Similarity 100.0%; Pred. No. 1.1e+04;
 Matches
           3; Conservative 0; Mismatches 0; Indels
                                                                0; Gaps
                                                                            0;
           1 AKS 3
Qу
             111
Db
           5 AKS 7
```

```
RESULT 20
US-09-848-664-6
; Sequence 6, Application US/09848664
; Patent No. US20020146414A1
; GENERAL INFORMATION:
; APPLICANT: Sakiyama-Elbert, Shelly E.
; APPLICANT: Hubbell, Jeffrey A.
; TITLE OF INVENTION: Controlled Release of No. US20020146414A1-Heparin Binding
 TITLE OF INVENTION: Factors from Heparin Containing Matrices
  FILE REFERENCE: ETH 108
  CURRENT APPLICATION NUMBER: US/09/848,664
; CURRENT FILING DATE: 2001-05-03
; PRIOR APPLICATION NUMBER: 09/298,084
; PRIOR FILING DATE: 1999-04-22
; NUMBER OF SEQ ID NOS: 31
  SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 6
   LENGTH: 11
   TYPE: PRT
   ORGANISM: Homo sapiens
US-09-848-664-6
 Query Match
                         27.3%; Score 3; DB 9; Length 11;
 Best Local Similarity 100.0%; Pred. No. 1.1e+04;
           3; Conservative 0; Mismatches 0; Indels
                                                               0; Gaps
                                                                           0;
           3 SRK 5
Qу
             111
           4 SRK 6
Db
RESULT 21
US-09-071-838-286
; Sequence 286, Application US/09071838
; Patent No. US20020152501A1
; GENERAL INFORMATION:
    APPLICANT: Fischer, Robert L.
    APPLICANT: Ohad, Nir
    APPLICANT: Kiyosue, Tomohiro
    APPLICANT: Yadegari, Ramin
    APPLICANT:
                Margossian, Linda
    APPLICANT: Harada, John
    APPLICANT: Goldberg, Robert B.
    TITLE OF INVENTION: Nucleic Acids That Control Seed and
    TITLE OF INVENTION: Fruit Development in Plants
    NUMBER OF SEQUENCES: 324
    CORRESPONDENCE ADDRESS:
      ADDRESSEE: Townsend and Townsend and Crew LLP
      STREET: Two Embarcadero Center, Eighth Floor
      CITY: San Francisco
      STATE: California
      COUNTRY: USA
      ZIP: 94111-3834
    COMPUTER READABLE FORM:
      MEDIUM TYPE: Floppy disk
```

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COMPUTER: IBM PC compatible
      OPERATING SYSTEM: PC-DOS/MS-DOS
      SOFTWARE: PatentIn Release #1.0, Version #1.30
    CURRENT APPLICATION DATA:
      APPLICATION NUMBER: US/09/071,838
      FILING DATE: 01-MAY-1998
      CLASSIFICATION: 800
    ATTORNEY/AGENT INFORMATION:
   NAME: Bastian, Kevin L.
      REGISTRATION NUMBER: 34,774
      REFERENCE/DOCKET NUMBER: 023070-086100US
    TELECOMMUNICATION INFORMATION:
      TELEPHONE: (415) 576-0200
      TELEFAX: (415) 576-0300
  INFORMATION FOR SEQ ID NO: 286:
    SEQUENCE CHARACTERISTICS:
      LENGTH: 11 amino acids
      TYPE: amino acid
      TOPOLOGY: linear
    MOLECULE TYPE: peptide
US-09-071-838-286
                        27.3%; Score 3; DB 9; Length 11;
  Query Match
  Best Local Similarity 100.0%; Pred. No. 1.1e+04;
 Matches 3; Conservative 0; Mismatches 0; Indels
                                                                           0;
          9 SLM 11
Qy
             -111
           1 SLM 3
RESULT 22
US-09-968-561A-298
; Sequence 298, Application US/09968561A
; Patent No. US20020164642A1
; GENERAL INFORMATION:
; APPLICANT: Tomlinson, Ian M
; APPLICANT: Winter, Gregory
; TITLE OF INVENTION: Method to Screen Phage Display Libraries with Different
Ligands
; FILE REFERENCE: 8039/1073B
  CURRENT APPLICATION NUMBER: US/09/968,561A
; CURRENT FILING DATE: 2001-10-01
; PRIOR APPLICATION NUMBER: GB 9722131.1
  PRIOR FILING DATE: 1997-10-20
 PRIOR APPLICATION NUMBER: US 60/065,248
; PRIOR FILING DATE: 1997-11-13
  PRIOR APPLICATION NUMBER: US 60/066,729
  PRIOR FILING DATE: 1997-11-21
; PRIOR APPLICATION NUMBER: PCT/GB98/03135
 PRIOR FILING DATE: 1998-10-20
 PRIOR APPLICATION NUMBER: US 09/511,939
  PRIOR FILING DATE: 2000-02-24
; NUMBER OF SEQ ID NOS: 350
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 298
; LENGTH: 11
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ORGANISM: Homo sapiens
US-09-968-561A-298
  Query Match
                          27.3%; Score 3; DB 9; Length 11;
  Best Local Similarity 100.0%; Pred. No. 1.1e+04;
  Matches
           3; Conservative
                              0; Mismatches
                                                  0; Indels
                                                                    Gaps
                                                                             0;
            8 SSL 10
QУ
              8 SSL 10
Db
RESULT 23
US-09-969-244-11
; Sequence 11, Application US/09969244
; Patent No. US20020173451A1
; GENERAL INFORMATION:
  APPLICANT: Merck & Co., Inc.
  APPLICANT: Yao, Siu-Long
; APPLICANT: Jones, Raymond E.
; APPLICANT: Defeo-Jones, Deborah
; APPLICANT: Heimbrook, David C.
  APPLICANT: Rhymer, Patricia A.
  APPLICANT: Wasserbly, Pamela J.
  TITLE OF INVENTION: A METHOD OF TREATING CANCER
   FILE REFERENCE: 20665
  CURRENT APPLICATION NUMBER: US/09/969,244
   CURRENT FILING DATE: 2001-10-02
   PRIOR APPLICATION NUMBER: 60/242,815
  PRIOR FILING DATE: 2000-10-24
; NUMBER OF SEQ ID NOS: 46
   SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 11
   LENGTH: 11
   TYPE: PRT
   ORGANISM: Artificial Sequence
   FEATURE:
   OTHER INFORMATION: completely synthetic amino acid sequence
   NAME/KEY: ACETYLATION
   LOCATION: (1)...(1)
    OTHER INFORMATION: acetylated N-terminus amino acid
US-09-969-244-11
  Query Match
                         27.3%; Score 3; DB 9; Length 11;
  Best Local Similarity
                         100.0%; Pred. No. 1.1e+04;
           3; Conservative
 Matches
                              0; Mismatches
                                                  0;
                                                      Indels
                                                                0; Gaps
                                                                            0;
            8 SSL 10
Qу
             \perp
            9 SSL 11
Db
RESULT 24
US-09-969-244-18
; Sequence 18, Application US/09969244
; Patent No. US20020173451A1
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TYPE: PRT

```
; GENERAL INFORMATION:
  APPLICANT: Merck & Co., Inc.
  APPLICANT: Yao, Siu-Long
  APPLICANT: Jones, Raymond E.
  APPLICANT: Defeo-Jones, Deborah
  APPLICANT: Heimbrook, David C.
  APPLICANT: Rhymer, Patricia A.
  APPLICANT: Wasserbly, Pamela J.
  TITLE OF INVENTION: A METHOD OF TREATING CANCER
  FILE REFERENCE: 20665
  CURRENT APPLICATION NUMBER: US/09/969,244
  CURRENT FILING DATE: 2001-10-02
  PRIOR APPLICATION NUMBER: 60/242,815
  PRIOR FILING DATE: 2000-10-24
 NUMBER OF SEQ ID NOS: 46
  SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 18
   LENGTH: 11
   TYPE: PRT
;
   ORGANISM: Artificial Sequence
ï
   FEATURE:
   OTHER INFORMATION: completely synthetic amino acid sequence
   NAME/KEY: AMIDATION
   LOCATION: (11)...(11)
   OTHER INFORMATION: leucinamide
US-09-969-244-18
 Query Match
                         27.3%; Score 3; DB 9; Length 11;
 Best Local Similarity 100.0%; Pred. No. 1.1e+04;
 Matches 3; Conservative
                              0; Mismatches 0; Indels
                                                                0; Gaps
                                                                            0;
           8 SSL 10
Qν
             -111
            9 SSL 11
RESULT 25
US-09-757-774-13
; Sequence 13, Application US/09757774
; Publication No. US20020187156A1
; GENERAL INFORMATION:
 APPLICANT: Dintzis, Howard M.
 APPLICANT: Dintzis, Renee
  APPLICANT:
              Blodgett, James
  APPLICANT: Cheronis, John
  TITLE OF INVENTION: THERAPEUTIC SUPPRESSION OF SPECIFIC IMMUNE RESPONSES BY
  TITLE OF INVENTION: ADMINISTRATION OF OLIGOMERIC FORMS OF ANTIGEN OF
CONTROLLED
  TITLE OF INVENTION: CHEMISTRY
  FILE REFERENCE: 07265/124004
  CURRENT APPLICATION NUMBER: US/09/757,774
  CURRENT FILING DATE: 2001-01-09
  PRIOR APPLICATION NUMBER: US 08/440,322
; PRIOR FILING DATE: 1995-05-12
; PRIOR APPLICATION NUMBER: US 07/808,797
; PRIOR FILING DATE: 1991-12-17
; PRIOR APPLICATION NUMBER: US 07/628,858
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PRIOR FILING DATE: 1990-12-17
   PRIOR APPLICATION NUMBER: US 07/354,710
   PRIOR FILING DATE: 1989-05-22
   PRIOR APPLICATION NUMBER: US 07/248,293
  PRIOR FILING DATE: 1988-09-21
  PRIOR APPLICATION NUMBER: US 06/869,808
; PRIOR FILING DATE: 1986-05-29
  PRIOR APPLICATION NUMBER: US 06/460,266
  PRIOR FILING DATE: 1983-01-24
  NUMBER OF SEQ ID NOS: 23
  SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 13
   LENGTH: 11
   TYPE: PRT
    ORGANISM: Mus musculus
US-09-757-774-13
                         27.3%; Score 3; DB 9; Length 11;
  Query Match
  Best Local Similarity 100.0%; Pred. No. 1.1e+04;
 Matches
            3; Conservative 0; Mismatches 0; Indels
                                                                 0; Gaps
                                                                             0;
            1 AKS 3
Qу
            . [ ] [
            3 AKS 5
RESULT 26
US-09-999-724-76
; Sequence 76, Application US/09999724
; Publication No. US20030022355A1
; GENERAL INFORMATION:
; APPLICANT: WICKHAM, THOMAS J.
; APPLICANT: KOVESDI, IMRE
 APPLICANT: BROUGH, DOUGLAS E.
  TITLE OF INVENTION: VECTORS AND METHODS FOR GENE TRANSFER
  FILE REFERENCE: 212960
  CURRENT APPLICATION NUMBER: US/09/999,724
  CURRENT FILING DATE: 2001-10-24
; PRIOR APPLICATION NUMBER: US 09/101,751
; PRIOR FILING DATE: 1999-01-29
  PRIOR APPLICATION NUMBER: WO 96US19150
  PRIOR FILING DATE: 1996-11-27
  PRIOR APPLICATION NUMBER: US 08/700,846
  PRIOR FILING DATE: 1996-08-21
  PRIOR APPLICATION NUMBER: US 08/701,124
  PRIOR FILING DATE: 1996-08-21
  PRIOR APPLICATION NUMBER: US 08/563,368
; PRIOR FILING DATE: 1995-11-28
; NUMBER OF SEQ ID NOS: 94
  SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 76
   LENGTH: 11
   TYPE: PRT
   ORGANISM: Artificial Sequence
   FEATURE:
   OTHER INFORMATION: Synthetic
US-09-999-724-76
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```
Best Local Similarity 100.0%; Pred. No. 1.1e+04;
           3; Conservative 0; Mismatches 0; Indels
                                                               0; Gaps
                                                                           0;
           3 SRK 5
Qy
             Db
           1 SRK 3
RESULT 27
US-09-876-904A-369
; Sequence 369, Application US/09876904A
; Publication No. US20030072794A1
; GENERAL INFORMATION:
; APPLICANT: BOULIKAS, TENI
; TITLE OF INVENTION: ENCAPSULATION OF PLASMID DNA (LIPOGENES TM) AND
THERAPEUTIC
; TITLE OF INVENTION: AGENTS WITH NUCLEAR LOCALIZATION SIGNAL/FUSOGENIC
PEPTIDE
; TITLE OF INVENTION: CONJUGATES INTO TARGETED LIPOSOME COMPLEXES
; FILE REFERENCE: TB-2002.00
  CURRENT APPLICATION NUMBER: US/09/876,904A
; CURRENT FILING DATE: 2001-06-08
; PRIOR APPLICATION NUMBER: US 60/210,925
  PRIOR FILING DATE: 2000-06-09
  NUMBER OF SEQ ID NOS: 629
 SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 369
   LENGTH: 11
   TYPE: PRT
   ORGANISM: Drosophila Suvar
   FEATURE:
   OTHER INFORMATION: (3) 7 gene product involved in
   OTHER INFORMATION: position-effect variegation (932 aas).
US-09-876-904A-369
  Query Match
                         27.3%; Score 3; DB 10; Length 11;
  Best Local Similarity 100.0%; Pred. No. 1.1e+04;
           3; Conservative 0; Mismatches 0; Indels
Qу
           3 SRK 5
             111
Db
           4 SRK 6
RESULT 28
US-09-876-904A-509
; Sequence 509, Application US/09876904A
; Publication No. US20030072794A1
; GENERAL INFORMATION:
; APPLICANT: BOULIKAS, TENI
; TITLE OF INVENTION: ENCAPSULATION OF PLASMID DNA (LIPOGENES TM) AND
THERAPEUTIC
; TITLE OF INVENTION: AGENTS WITH NUCLEAR LOCALIZATION SIGNAL/FUSOGENIC
PEPTIDE
; TITLE OF INVENTION: CONJUGATES INTO TARGETED LIPOSOME COMPLEXES
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27.3%; Score 3; DB 10; Length 11;

Query Match

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FILE REFERENCE: TB-2002.00
   CURRENT APPLICATION NUMBER: US/09/876,904A
   CURRENT FILING DATE: 2001-06-08
   PRIOR APPLICATION NUMBER: US 60/210,925
   PRIOR FILING DATE: 2000-06-09
   NUMBER OF SEQ ID NOS: 629
   SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 509
   LENGTH: 11
    TYPE: PRT
    ORGANISM: Unknown Organism
    FEATURE:
    OTHER INFORMATION: Description of Unknown Organism: Ig/EBP-1 (immunoglobulin
    OTHER INFORMATION: gene enhancer-binding protein).
US-09-876-904A-509
  Query Match
                          27.3%; Score 3; DB 10; Length 11;
                          100.0%; Pred. No. 1.1e+04;
  Best Local Similarity
             3; Conservative 0; Mismatches
                                                       Indels
                                                                  0; Gaps
                                                                              0;
            2 KSR 4
Qу
              IIII
Db
            3 KSR 5
RESULT 29
US-09-774-381-59
; Sequence 59, Application US/09774381
; Publication No. US20030082677A1
; GENERAL INFORMATION:
  APPLICANT: Holtzman, Douglas A.
  APPLICANT: McCarthy, Sean A.
  APPLICANT: Pan, Yang
  APPLICANT: Gearing, David P.
  TITLE OF INVENTION: NOVEL EDIRF, MTR-1, LSP-1, TAP-1, AND PA-I MOLECULES TITLE OF INVENTION: AND USES THEREFOR
   FILE REFERENCE: MNI-107CP2
:
  CURRENT APPLICATION NUMBER: US/09/774,381
  CURRENT FILING DATE: 2001-01-30
   PRIOR APPLICATION NUMBER: 08/941,354
   PRIOR FILING DATE: 1999-09-30
   PRIOR APPLICATION NUMBER: 09/010,674
   PRIOR FILING DATE: 1998-01-22
   PRIOR APPLICATION NUMBER: 60/061,149
   PRIOR FILING DATE: 1997-10-06
   PRIOR APPLICATION NUMBER: 09/014,347
   PRIOR FILING DATE: 1998-01-27
   PRIOR APPLICATION NUMBER:
                              60/061,159
   PRIOR FILING DATE: 1997-10-06
   PRIOR APPLICATION NUMBER: 09/474,151
   PRIOR FILING DATE: 2000-12-21
   PRIOR APPLICATION NUMBER: 09/004,206
   PRIOR FILING DATE: 1998-01-08
   PRIOR APPLICATION NUMBER: 60/061,143
   PRIOR FILING DATE: 1997-10-06
   PRIOR APPLICATION NUMBER: 09/483,414
   PRIOR FILING DATE: 2000-01-14
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PRIOR APPLICATION NUMBER: 09/213,571
   PRIOR FILING DATE: 1998-12-18
   PRIOR APPLICATION NUMBER: 08/994,890
   PRIOR FILING DATE: 1997-12-19
  NUMBER OF SEQ ID NOS:
  SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 59
   LENGTH: 11
    TYPE: PRT
    ORGANISM: Mus musculus
US-09-774-381-59
  Query Match
                         27.3%; Score 3; DB 10; Length 11;
  Best Local Similarity 100.0%; Pred. No. 1.1e+04;
           3; Conservative
                              0; Mismatches
                                                  0; Indels
                                                                0; Gaps
                                                                            0;
           4 RKG 6
Qу
              ++1
           7 RKG 9
Db
RESULT 30
US-09-852-910-259
; Sequence 259, Application US/09852910
; Publication No. US20030096297A1
; GENERAL INFORMATION:
  APPLICANT: Hamm, Heidi
  APPLICANT: Gilchrist, Annette
  TITLE OF INVENTION: Method For Identifying Inhibitors of G Protein Coupled
Receptor Signaling
; FILE REFERENCE: 2661-101
  CURRENT APPLICATION NUMBER: US/09/852,910
; CURRENT FILING DATE: 2001-09-18
; PRIOR APPLICATION NUMBER: US 60/275,472
; PRIOR FILING DATE: 2001-03-14
; NUMBER OF SEQ ID NOS: 271
  SOFTWARE: PatentIn version 3.0
; SEQ ID NO 259
   LENGTH: 11
   TYPE: PRT
   ORGANISM: Artificial Sequence
   FEATURE:
   NAME/KEY: misc feature
   LOCATION: (1)..(11)
    OTHER INFORMATION: Gl1 library peptide
US-09-852-910-259
  Query Match
                         27.3%; Score 3; DB 10; Length 11;
  Best Local Similarity 100.0%; Pred. No. 1.1e+04;
  Matches
            3; Conservative 0; Mismatches 0; Indels
                                                                0; Gaps
Qу
           9 SLM 11
             \perp
Db
           9 SLM 11
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US-09-802-083-14
; Sequence 14, Application US/09802083
; Publication No. US20030119075A1
; GENERAL INFORMATION:
; APPLICANT: Kirchhofer, Daniel K.
; APPLICANT: Lowe, David G.
 APPLICANT: Presta, Leonard G.
  TITLE OF INVENTION: Anti-Tissue Factor Antibodies with Enhanced
  TITLE OF INVENTION: Anticoagulant Potency
  FILE REFERENCE: P1736R1
  CURRENT APPLICATION NUMBER: US/09/802,083
  CURRENT FILING DATE: 2001-03-08
 PRIOR APPLICATION NUMBER: US 60/189,775
 PRIOR FILING DATE: 2000-03-16
 NUMBER OF SEQ ID NOS: 28
; SEQ ID NO 14
   LENGTH: 11
   TYPE: PRT
   ORGANISM: Homo sapiens
US-09-802-083-14
 Query Match
                         27.3%; Score 3; DB 10; Length 11;
 Best Local Similarity 100.0%; Pred. No. 1.1e+04;
                              0; Mismatches
 Matches
           3; Conservative
                                                0; Indels
                                                                0; Gaps
           7 NSS 9
Qy ·
             \perp
           3 NSS 5
RESULT 32
US-09-776-191-59
; Sequence 59, Application US/09776191
; Publication No. US20030119168A1
; GENERAL INFORMATION:
  APPLICANT: Edwin L. Madison
  APPLICANT: Edgar O. Ong
 APPLICANT: Jiunn-Chern Yeh
  APPLICANT: Corvas International, Inc.
  TITLE OF INVENTION: NUCLEIC ACID MOLECULES ENCODING
  TITLE OF INVENTION: TRANSMEMBRANE SERINE PROTEASES, THE ENCODED PROTEINS AND
  TITLE OF INVENTION: METHODS BASED THEREON
  FILE REFERENCE: 24745-1607
  CURRENT APPLICATION NUMBER: US/09/776,191
  CURRENT FILING DATE: 2001-02-02
  PRIOR APPLICATION NUMBER: 60/213,124
  PRIOR FILING DATE: 2000-06-22
  PRIOR APPLICATION NUMBER: 60/234,840
  PRIOR FILING DATE: 2000-06-22
  PRIOR APPLICATION NUMBER: 60/179,982
  PRIOR FILING DATE: 2000-02-03
  PRIOR APPLICATION NUMBER: 60/183,542
  PRIOR FILING DATE: 2000-02-18
  PRIOR APPLICATION NUMBER: 09/657,968
 PRIOR FILING DATE: 2000-02-08
; NUMBER OF SEQ ID NOS: 72
; SOFTWARE: FastSEQ for Windows Version 4.0
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LENGTH: 11
    TYPE: PRT
    ORGANISM: Homo Sapien
US-09-776-191-59
  Query Match
                          27.3%; Score 3; DB 10; Length 11;
  Best Local Similarity 100.0%; Pred. No. 1.1e+04;
            3; Conservative
  Matches
                               0; Mismatches
                                                  0; Indels
                                                                 0; Gaps
                                                                             0;
QУ
           8 SSL 10
              \Box
Db
           8 SSL 10
RESULT 33
US-09-968-744A-298
; Sequence 298, Application US/09968744A
; Publication No. US20030148372A1
; GENERAL INFORMATION:
; APPLICANT: Tomlinson, Ian M
; APPLICANT: Winter, Gregory
  TITLE OF INVENTION: Method to Screen Phage Display Libraries with Different
Ligands
; FILE REFERENCE: 8039/1073
  CURRENT APPLICATION NUMBER: US/09/968,744A
  CURRENT FILING DATE: 2003-01-13
  PRIOR APPLICATION NUMBER: GB 9722131.1
  PRIOR FILING DATE: 1997-10-20
   PRIOR APPLICATION NUMBER: US 60/065,248
   PRIOR FILING DATE: 1997-11-13
   PRIOR APPLICATION NUMBER: US 60/066,729
  PRIOR FILING DATE: 1997-11-21
  PRIOR APPLICATION NUMBER: PCT/GB98/03135
  PRIOR FILING DATE: 1998-10-20
  PRIOR APPLICATION NUMBER: US 09/511,939
  PRIOR FILING DATE: 2000-02-24
; NUMBER OF SEQ ID NOS: 350
  SOFTWARE: PatentIn version 3.1
; SEQ ID NO 298
   LENGTH: 11
   TYPE: PRT
   ORGANISM: Homo sapiens
US-09-968-744A-298
  Query Match
                         27.3%; Score 3; DB 10; Length 11;
  Best Local Similarity
                         100.0%; Pred. No. 1.1e+04;
 Matches
           3; Conservative
                               0; Mismatches
                                                 0; Indels
                                                                0; Gaps
                                                                             0;
Qу
           8 SSL 10
              IIII
Db
           8 SSL 10
RESULT 34
US-09-795-798-16
; Sequence 16, Application US/09795798
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; SEQ ID NO 59

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GENERAL INFORMATION:
        APPLICANT: Presta, Leonard G.
                   Jardieu, Paula M.
        TITLE OF INVENTION: Humanized Anti-CD11a Antibodies
        NUMBER OF SEQUENCES: 24
        CORRESPONDENCE ADDRESS:
             ADDRESSEE: Genentech, Inc.
             STREET: 1 DNA Way
             CITY: South San Francisco
             STATE: California
             COUNTRY: USA
             ZIP: 94080
        COMPUTER READABLE FORM:
             MEDIUM TYPE: 3.5 inch, 1.44 Mb floppy disk
             COMPUTER: IBM PC compatible
             OPERATING SYSTEM: PC-DOS/MS-DOS
             SOFTWARE: WinPatin (Genentech)
        CURRENT APPLICATION DATA:
             APPLICATION NUMBER: US/09/795,798
             FILING DATE: 28-Feb-2001
             CLASSIFICATION: <Unknown>
        PRIOR APPLICATION DATA:
             APPLICATION NUMBER: 08/974,899
             FILING DATE: <Unknown>
        ATTORNEY/AGENT INFORMATION:
             NAME: Lee, Wendy M.
             REGISTRATION NUMBER: 40,378
             REFERENCE/DOCKET NUMBER: P1014R1
        TELECOMMUNICATION INFORMATION:
             TELEPHONE: 650/225-1994
             TELEFAX: 650/952-9881
   INFORMATION FOR SEQ ID NO: 16:
        SEQUENCE CHARACTERISTICS:
             LENGTH: 11 amino acids
             TYPE: Amino Acid
             TOPOLOGY: Linear
        SEQUENCE DESCRIPTION: SEQ ID NO: 16:
US-09-795-798-16
 Query Match
                         27.3%; Score 3; DB 11; Length 11;
 Best Local Similarity 100.0%; Pred. No. 1.1e+04;
 Matches
           3; Conservative
                              0; Mismatches 0; Indels 0; Gaps
                                                                             0:
           7 NSS 9
Qу
             3 NSS 5
RESULT 35
US-09-969-322-11
; Sequence 11, Application US/09969322
; Publication No. US20030215456A1
; GENERAL INFORMATION:
; APPLICANT: Merck & Co., Inc.
; APPLICANT: Yao, Siu-Long
; APPLICANT: Jones, Raymond E.
```

; Publication No. US20030207336A1

```
APPLICANT: Defeo-Jones, Deborah
  APPLICANT: Heimbrook, David C.
  APPLICANT:
              Rhymer, Patricia A.
  APPLICANT: Wasserbly, Pamela J.
  TITLE OF INVENTION: A METHOD OF TREATING CANCER
  FILE REFERENCE: 20663
  CURRENT APPLICATION NUMBER: US/09/969,322
  CURRENT FILING DATE: 2001-10-02
  PRIOR APPLICATION NUMBER: 60/242,847
  PRIOR FILING DATE: 2000-10-24
  NUMBER OF SEQ ID NOS: 46
  SOFTWARE: FastSEQ for Windows Version 4.0
 SEQ ID NO 11
   LENGTH: 11
   TYPE: PRT
   ORGANISM: Artificial Sequence
   FEATURE:
   OTHER INFORMATION: completely synthetic amino acid sequence
   NAME/KEY: ACETYLATION
   LOCATION: (1)...(1)
   OTHER INFORMATION: acetylated N-terminus amino acid
US-09-969-322-11
 Query Match
                         27.3%; Score 3; DB 11; Length 11;
 Best Local Similarity 100.0%; Pred. No. 1.1e+04;
 Matches
                               0; Mismatches 0; Indels
           3; Conservative
                                                                0; Gaps
                                                                            0;
           8 SSL 10
Qу
             111
Db
           9 SSL 11
RESULT 36
US-09-969-322-18
; Sequence 18, Application US/09969322
; Publication No. US20030215456A1
; GENERAL INFORMATION:
; APPLICANT: Merck & Co., Inc.
; APPLICANT: Yao, Siu-Long
; APPLICANT: Jones, Raymond E.
  APPLICANT: Defeo-Jones, Deborah
  APPLICANT: Heimbrook, David C.
  APPLICANT:
              Rhymer, Patricia A.
  APPLICANT: Wasserbly, Pamela J.
  TITLE OF INVENTION: A METHOD OF TREATING CANCER
  FILE REFERENCE: 20663
  CURRENT APPLICATION NUMBER: US/09/969,322
  CURRENT FILING DATE: 2001-10-02
  PRIOR APPLICATION NUMBER: 60/242,847
  PRIOR FILING DATE: 2000-10-24
  NUMBER OF SEQ ID NOS: 46
  SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 18
   LENGTH: 11
   TYPE: PRT
   ORGANISM: Artificial Sequence
   FEATURE:
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OTHER INFORMATION: completely synthetic amino acid sequence
   NAME/KEY: AMIDATION
   LOCATION: (11)...(11)
    OTHER INFORMATION: leucinamide
US-09-969-322-18
  Query Match
                         27.3%; Score 3; DB 11; Length 11;
  Best Local Similarity 100.0%; Pred. No. 1.1e+04;
                               0; Mismatches
 Matches
           3; Conservative
                                                                            0;
                                                 0; Indels
                                                                0; Gaps
            8 SSL 10
Qу
             +
Db
            9 SSL 11
RESULT 37
US-09-833-245-301
; Sequence 301, Application US/09833245
; Publication No. US20040010134A1
; GENERAL INFORMATION:
; APPLICANT: Human Genome Sciences, Inc.
  TITLE OF INVENTION: Albumin Fusion Proteins
  FILE REFERENCE: PF546PCT
  CURRENT APPLICATION NUMBER: US/09/833,245
  CURRENT FILING DATE: 2001-04-12
  PRIOR APPLICATION NUMBER: 60/229, 358
  PRIOR FILING DATE: 2000-04-12
;
  PRIOR APPLICATION NUMBER: 60/256, 931
  PRIOR FILING DATE: 2000-12-21
  PRIOR APPLICATION NUMBER: 60/199, 384
 PRIOR FILING DATE: 2000-04-25
; NUMBER OF SEQ ID NOS: 2267
  SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 301
   LENGTH: 11
   TYPE: PRT
   ORGANISM: Homo sapiens
US-09-833-245-301
 Query Match
                         27.3%; Score 3; DB 11; Length 11;
  Best Local Similarity 100.0%; Pred. No. 1.1e+04;
           3; Conservative 0; Mismatches 0; Indels
                                                                0; Gaps
                                                                            0;
Qу
            8 SSL 10
              \mathbf{I}
            1 SSL 3
RESULT 38
US-09-968-561A-298
; Sequence 298, Application US/09968561A
; Publication No. US20040038291A2
; GENERAL INFORMATION:
; APPLICANT: Tomlinson, Ian M
; APPLICANT: Winter, Gregory
; TITLE OF INVENTION: Method to Screen Phage Display Libraries with Different
Ligands
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FILE REFERENCE: 8039/1073B
  CURRENT APPLICATION NUMBER: US/09/968,561A
  CURRENT FILING DATE: 2001-10-01
; PRIOR APPLICATION NUMBER: GB 9722131.1
; PRIOR FILING DATE: 1997-10-20
; PRIOR APPLICATION NUMBER: US 60/065,248
  PRIOR FILING DATE: 1997-11-13
 PRIOR APPLICATION NUMBER: US 60/066,729
  PRIOR FILING DATE: 1997-11-21
  PRIOR APPLICATION NUMBER: PCT/GB98/03135
  PRIOR FILING DATE: 1998-10-20
  PRIOR APPLICATION NUMBER: US 09/511,939
 PRIOR FILING DATE: 2000-02-24
; NUMBER OF SEQ ID NOS: 350
  SOFTWARE: PatentIn version 3.1
; SEQ ID NO 298
   LENGTH: 11
   TYPE: PRT
   ORGANISM: Homo sapiens
US-09-968-561A-298
                         27.3%; Score 3; DB 12; Length 11;
 Query Match
 Best Local Similarity 100.0%; Pred. No. 1.1e+04;
                              0; Mismatches
 Matches
           3; Conservative
                                                  0; Indels
                                                                0;
                                                                    Gaps
                                                                            0;
           8 SSL 10
Qу
             -111
           8 SSL 10
RESULT 39
US-10-289-456-91
; Sequence 91, Application US/10289456
; Publication No. US20040033211A1
; GENERAL INFORMATION:
; APPLICANT: Bachmann, Martin
; APPLICANT: Maurer, Patrick
; APPLICANT: Spohn, Gunther
; TITLE OF INVENTION: Antigen Arrays for Treatment of Bone Disease
; FILE REFERENCE: 1700.0330001
  CURRENT APPLICATION NUMBER: US/10/289,456
  CURRENT FILING DATE: 2002-11-07
  PRIOR APPLICATION NUMBER: PCT/IB02/00166
  PRIOR FILING DATE: 2002-01-21
  PRIOR APPLICATION NUMBER: US 10/050,902
  PRIOR FILING DATE: 2002-01-18
  PRIOR APPLICATION NUMBER: US 60/396,635
  PRIOR FILING DATE: 2002-07-19
  PRIOR APPLICATION NUMBER: US 60/331,045
  PRIOR FILING DATE: 2001-11-07
  NUMBER OF SEQ ID NOS: 170
  SOFTWARE: PatentIn version 3.2
; SEQ ID NO 91
   LENGTH: 11
   TYPE: PRT
   ORGANISM: Artificial Sequence
   FEATURE:
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US-10-289-456-91
  Query Match
                         27.3%; Score 3; DB 12; Length 11;
  Best Local Similarity 100.0%; Pred. No. 1.1e+04;
           3; Conservative 0; Mismatches 0; Indels
                                                                 0; Gaps
                                                                             0;
            6 GNS 8
Qу
              | | |
            5 GNS 7
Db
RESULT 40
US-10-417-895A-63
; Sequence 63, Application US/10417895A
; Publication No. US20040033569A1
; GENERAL INFORMATION:
; APPLICANT: Crea, Roberto
  APPLICANT: Cappuccilli, Guido
  TITLE OF INVENTION: "DOPING" IN WALK-THROUGH MUTAGENESIS
; FILE REFERENCE: 1551.2002-001
; CURRENT APPLICATION NUMBER: US/10/417,895A
; CURRENT FILING DATE: 2003-04-16
  PRIOR APPLICATION NUMBER: 60/373,686
  PRIOR FILING DATE: 2002-04-17
 NUMBER OF SEQ ID NOS: 86
  SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 63
   LENGTH: 11
   TYPE: PRT
   ORGANISM: Artificial Sequence
   FEATURE:
   OTHER INFORMATION: variant peptide for third complementarity
   OTHER INFORMATION: determining region of Fv region of an
   OTHER INFORMATION: immunoglobulin
US-10-417-895A-63
 Query Match
                         27.3%; Score 3; DB 12; Length 11;
  Best Local Similarity 100.0%; Pred. No. 1.1e+04;
 Matches
           3; Conservative 0; Mismatches 0; Indels
Qу
           7 NSS 9
              \parallel \parallel \parallel
Db
            1 NSS 3
RESULT 41
US-10-417-895A-66
; Sequence 66, Application US/10417895A
; Publication No. US20040033569A1
; GENERAL INFORMATION:
 APPLICANT: Crea, Roberto
  APPLICANT: Cappuccilli, Guido
 TITLE OF INVENTION: "DOPING" IN WALK-THROUGH MUTAGENESIS
; FILE REFERENCE: 1551.2002-001
; CURRENT APPLICATION NUMBER: US/10/417,895A
; CURRENT FILING DATE: 2003-04-16
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; OTHER INFORMATION: RANKL peptide EF loop

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PRIOR APPLICATION NUMBER: 60/373,686
  PRIOR FILING DATE: 2002-04-17
  NUMBER OF SEQ ID NOS: 86
  SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 66
   LENGTH: 11
   TYPE: PRT
   ORGANISM: Artificial Sequence
   FEATURE:
   OTHER INFORMATION: variant peptide for third complementarity
   OTHER INFORMATION: determining region of Fv region of an
   OTHER INFORMATION: immunoglobulin
US-10-417-895A-66
                         27.3%; Score 3; DB 12; Length 11;
 Query Match
 Best Local Similarity 100.0%; Pred. No. 1.1e+04;
           3; Conservative 0; Mismatches 0; Indels
 Matches
                                                                0; Gaps
                                                                            0;
           7 NSS 9
Qу
             -1+1
           1 NSS 3
Db
RESULT 42
US-10-356-824-3
; Sequence 3, Application US/10356824
; Publication No. US20040037823A9
; GENERAL INFORMATION:
 APPLICANT: Shak, Steve
  APPLICANT: Paton, Virginia
  TITLE OF INVENTION: TREATMENT WITH ANTI-ErbB2 ANTIBODIES
  FILE REFERENCE: P1256R1
  CURRENT APPLICATION NUMBER: US/10/356,824
  CURRENT FILING DATE: 2003-02-03
  PRIOR APPLICATION NUMBER: US/09/208,649
  PRIOR FILING DATE: 1998-12-10
  PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: US 60/069,346
; PRIOR FILING DATE: EARLIER FILING DATE: 1997-12-12
; NUMBER OF SEQ ID NOS: 9
; SEQ ID NO 3
   LENGTH: 11
   TYPE: PRT
   ORGANISM: Homo sapiens
US-10-356-824-3
 Query Match
                         27.3%; Score 3; DB 12; Length 11;
 Best Local Similarity 100.0%; Pred. No. 1.1e+04;
 Matches
           3; Conservative 0; Mismatches 0; Indels
                                                                    Gaps
           7 NSS 9
Qу
             -111
Db
           3 NSS 5
RESULT 43
US-10-430-685-35
; Sequence 35, Application US/10430685
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; Publication No. US20040039543A1
; GENERAL INFORMATION:
  APPLICANT: KECK, Peter
  TITLE OF INVENTION: COMPUTER METHOD AND APPARATUS FOR CLASSIFYING OBJECTS
  FILE REFERENCE: 63040-010210
  CURRENT APPLICATION NUMBER: US/10/430,685
  CURRENT FILING DATE: 2003-05-06
; PRIOR APPLICATION NUMBER: PCT/US01/44000
; PRIOR FILING DATE: 2001-11-06
 PRIOR APPLICATION NUMBER: 60/246,196
 PRIOR FILING DATE: 2000-11-06
 NUMBER OF SEQ ID NOS: 240
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 35
; LENGTH: 11
   TYPE: PRT
   ORGANISM: Homo sapiens
US-10-430-685-35
  Query Match
                         27.3%; Score 3; DB 12; Length 11;
  Best Local Similarity 100.0%; Pred. No. 1.1e+04;
  Matches 3; Conservative 0; Mismatches 0; Indels 0; Gaps
                                                                          0;
           3 SRK 5
Qу
             111
           2 SRK 4
Dh
RESULT 44
US-10-430-685-37
; Sequence 37, Application US/10430685
; Publication No. US20040039543A1
; GENERAL INFORMATION:
 APPLICANT: KECK, Peter
  TITLE OF INVENTION: COMPUTER METHOD AND APPARATUS FOR CLASSIFYING OBJECTS
  FILE REFERENCE: 63040-010210
  CURRENT APPLICATION NUMBER: US/10/430,685
  CURRENT FILING DATE: 2003-05-06
; PRIOR APPLICATION NUMBER: PCT/US01/44000
; PRIOR FILING DATE: 2001-11-06
  PRIOR APPLICATION NUMBER: 60/246,196
; PRIOR FILING DATE: 2000-11-06
; NUMBER OF SEQ ID NOS: 240
  SOFTWARE: PatentIn version 3.2
; SEQ ID NO 37
   LENGTH: 11
   TYPE: PRT
   ORGANISM: Homo sapiens
US-10-430-685-37
  Query Match
                         27.3%; Score 3; DB 12; Length 11;
  Best Local Similarity 100.0%; Pred. No. 1.1e+04;
            3; Conservative 0; Mismatches 0; Indels
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                                                                           0;
           3 SRK 5
Qy
             111
Db
           2 SRK 4
```

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RESULT 45
US-10-430-685-39
; Sequence 39, Application US/10430685
; Publication No. US20040039543A1
; GENERAL INFORMATION:
  APPLICANT: KECK, Peter
  TITLE OF INVENTION: COMPUTER METHOD AND APPARATUS FOR CLASSIFYING OBJECTS
   FILE REFERENCE: 63040-010210
   CURRENT APPLICATION NUMBER: US/10/430,685
   CURRENT FILING DATE: 2003-05-06
   PRIOR APPLICATION NUMBER: PCT/US01/44000
   PRIOR FILING DATE: 2001-11-06
   PRIOR APPLICATION NUMBER: 60/246,196
   PRIOR FILING DATE: 2000-11-06
  NUMBER OF SEQ ID NOS: 240
  SOFTWARE: PatentIn version 3.2
; SEQ ID NO 39
   LENGTH: 11
   TYPE: PRT
   ORGANISM: Homo sapiens
US-10-430-685-39
  Query Match
                          27.3%; Score 3; DB 12; Length 11;
  Best Local Similarity 100.0%; Pred. No. 1.1e+04;
            3; Conservative 0; Mismatches 0; Indels
                                                                 0; Gaps
 Matches
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            3 SRK 5
Qу
             -1.11
            2 SRK 4
Db
RESULT 46
US-10-600-152-3
; Sequence 3, Application US/10600152
; Publication No. US20040037824A1
; GENERAL INFORMATION:
; APPLICANT: Baughman, Sharon A.
; APPLICANT: Shak Steven
  TITLE OF INVENTION: Dosages for Treatment with Anti-ErbB2 Antibodies
  FILE REFERENCE: P1775R1
  CURRENT APPLICATION NUMBER: US/10/600,152
  CURRENT FILING DATE: 2003-06-20
  PRIOR APPLICATION NUMBER: 09/648,067
  PRIOR FILING DATE: 2000-08-25
   PRIOR APPLICATION NUMBER: US 60/151,018
   PRIOR FILING DATE: 1999-08-27
   PRIOR APPLICATION NUMBER: US 60/213,822
  PRIOR FILING DATE: 2000-06-23
  NUMBER OF SEQ ID NOS: 15
; SEQ ID NO 3
   LENGTH: 11
   TYPE: PRT
   ORGANISM: Artificial sequence
   OTHER INFORMATION: salvage receptor binding epitope
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27.3%; Score 3; DB 12; Length 11;
 Query Match
 Best Local Similarity 100.0%; Pred. No. 1.1e+04;
           3; Conservative 0; Mismatches 0; Indels
 Matches
                                                                0; Gaps
                                                                            0;
           7 NSS 9
Qу
             111
Db
           3 NSS 5
RESULT 47
US-10-609-217-980
; Sequence 980, Application US/10609217
; Publication No. US20040044188A1
; GENERAL INFORMATION:
  APPLICANT: FEIGE, ULRICH
  APPLICANT: LIU, CHUAN-FA
  APPLICANT: CHEETHAM, JANET C.
  APPLICANT: BOONE, THOMAS CHARLES
  TITLE OF INVENTION: MODIFIED PEPTIDES AS THERAPEUTIC AGENTS
  FILE REFERENCE: A-527
  CURRENT APPLICATION NUMBER: US/10/609,217
  CURRENT FILING DATE: 2003-06-27
  PRIOR APPLICATION NUMBER: US/09/428,082B
  PRIOR FILING DATE: 1999-10-22
  PRIOR APPLICATION NUMBER: 60/105,371
  PRIOR FILING DATE: 1998-10-23
  NUMBER OF SEQ ID NOS: 1133
  SOFTWARE: PatentIn version 3.1
; SEQ ID NO 980
   LENGTH: 11
   TYPE: PRT
   ORGANISM: Artificial Sequence
   FEATURE:
   OTHER INFORMATION: IL-1 ANTAGONIST PEPTIDE
US-10-609-217-980
 Query Match
                         27.3%; Score 3; DB 12; Length 11;
  Best Local Similarity 100.0%; Pred. No. 1.1e+04;
 Matches
           3; Conservative
                               0; Mismatches
                                                 0; Indels
                                                                0;
                                                                    Gaps
                                                                            0;
Qу
           7 NSS 9
             \mathbf{I}
           2 NSS 4
RESULT 48
US-10-398-104-179
; Sequence 179, Application US/10398104
; Publication No. US20040047880A1
; GENERAL INFORMATION:
 APPLICANT: De Bolle, Xavier Thomas
; APPLICANT: Letesson, Jean-Jacques
; APPLICANT: Lobet, Yves
; APPLICANT: Mertens, Pascal Yvon
; APPLICANT: Poolman, Jan
```

```
APPLICANT: Voet, Pierre
  TITLE OF INVENTION: COMPONENT FOR VACCINE
  FILE REFERENCE: B45242
   CURRENT APPLICATION NUMBER: US/10/398,104
  CURRENT FILING DATE: 2003-01-04
  PRIOR APPLICATION NUMBER: PCT/EP01/11409
  PRIOR FILING DATE: 2001-10-03
; PRIOR APPLICATION NUMBER: GB 0024200.8
  PRIOR FILING DATE: 2000-10-03
  NUMBER OF SEQ ID NOS: 352
  SOFTWARE: FastSEQ for Windows Version 4.0
 SEO ID NO 179
   LENGTH: 11
   TYPE: PRT
   ORGANISM: Artificial Sequence
   FEATURE:
   OTHER INFORMATION: LOS peptide mimotope sequence
US-10-398-104-179
  Query Match
                         27.3%; Score 3; DB 12; Length 11;
  Best Local Similarity
                         100.0%; Pred. No. 1.1e+04;
                              0; Mismatches
 Matches
           3; Conservative
                                                0;
                                                                0; Gaps
                                                                            0;
                                                     Indels
            8 SSL 10
Qу
             2 SSL 4
Dh
RESULT 49
US-10-458-860-31
; Sequence 31, Application US/10458860
; Publication No. US20040049800A1
; GENERAL INFORMATION:
; APPLICANT: Kopin, Alan S.
  APPLICANT: Beinborn, Martin
  TITLE OF INVENTION: Rapid Methods For Assessing Therapeutic
   TITLE OF INVENTION: Activity Using Animals Expressing Constitutively Active
G
  TITLE OF INVENTION: Protein-Coupled Receptors
  FILE REFERENCE: 00398/517002
  CURRENT APPLICATION NUMBER: US/10/458,860
  CURRENT FILING DATE: 2003-06-11
  PRIOR APPLICATION NUMBER: US 60/388,450
  PRIOR FILING DATE: 2002-06-13
  NUMBER OF SEQ ID NOS: 87
  SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 31
   LENGTH: 11
   TYPE: PRT
   ORGANISM: Artificial Sequence
    FEATURE:
    OTHER INFORMATION: Synthetic fragment
US-10-458-860-31
  Query Match
                         27.3%; Score 3; DB 12; Length 11;
  Best Local Similarity 100.0%; Pred. No. 1.1e+04;
 Matches
            3; Conservative
                              0; Mismatches
                                                  0; Indels
                                                                            0;
                                                                    Gaps
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1 AKS 3
Qу
              5 AKS 7
Db
RESULT 50
US-10-149-135-15
; Sequence 15, Application US/10149135
; Publication No. US20040053822A1
; GENERAL INFORMATION:
  APPLICANT: Fikes, John
  APPLICANT: Sette, Alessandro
  APPLICANT:
             Sidney, John
              Southwood, Scott
  APPLICANT:
  APPLICANT:
              Chesnut, Robert
              Celis, Esteban
  APPLICANT:
  APPLICANT: Keogh, Elissa
  TITLE OF INVENTION: Inducing Cellular Immune Responses to
  TITLE OF INVENTION: MAGE2/3 Using Peptide and Nucleic Acid Compositions
  FILE REFERENCE: 2060.0130001
  CURRENT APPLICATION NUMBER: US/10/149,135
  CURRENT FILING DATE: 2000-12-11
  PRIOR APPLICATION NUMBER: PCT/US00/33545
  PRIOR FILING DATE: 2000-12-11
  PRIOR APPLICATION NUMBER: US 09/458,298
  PRIOR FILING DATE: 1999-12-10
   PRIOR APPLICATION NUMBER: US 09/189,702
  PRIOR FILING DATE: 1998-11-10
  PRIOR APPLICATION NUMBER: US 08/205,713
  PRIOR FILING DATE: 1994-03-04
  PRIOR APPLICATION NUMBER: US 08/159,184
  PRIOR FILING DATE: 1993-11-29
  PRIOR APPLICATION NUMBER: US 08/073,205
  PRIOR FILING DATE: 1993-06-04
  PRIOR APPLICATION NUMBER: US 08/027,146
  PRIOR FILING DATE: 1993-03-05
; NUMBER OF SEQ ID NOS: 2479
  SOFTWARE: PatentIn version 3.1
; SEQ ID NO 15
   LENGTH: 11
   TYPE: PRT
   ORGANISM: Artificial Sequence
   FEATURE:
   OTHER INFORMATION: Artificial Peptide
US-10-149-135-15
 Query Match
                          27.3%; Score 3; DB 12; Length 11;
  Best Local Similarity 100.0%; Pred. No. 1.1e+04;
 Matches
            3; Conservative 0; Mismatches 0;
                                                      Indels
                                                                 0; Gaps
                                                                             0;
            3 SRK 5
Qy
             -111
            2 SRK 4
Db
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; Sequence 59, Application US/10149135
; Publication No. US20040053822A1
; GENERAL INFORMATION:
  APPLICANT: Fikes, John
; APPLICANT: Sette, Alessandro
   APPLICANT: Sidney, John
  APPLICANT: Southwood, Scott
  APPLICANT: Chesnut, Robert
   APPLICANT:
              Celis, Esteban
   APPLICANT: Keogh, Elissa
   TITLE OF INVENTION: Inducing Cellular Immune Responses to
   TITLE OF INVENTION: MAGE2/3 Using Peptide and Nucleic Acid Compositions
   FILE REFERENCE: 2060.0130001
   CURRENT APPLICATION NUMBER: US/10/149,135
   CURRENT FILING DATE: 2000-12-11
   PRIOR APPLICATION NUMBER: PCT/US00/33545
   PRIOR FILING DATE: 2000-12-11
   PRIOR APPLICATION NUMBER: US 09/458,298
   PRIOR FILING DATE: 1999-12-10
   PRIOR APPLICATION NUMBER: US 09/189,702
   PRIOR FILING DATE: 1998-11-10
   PRIOR APPLICATION NUMBER: US 08/205,713
   PRIOR FILING DATE: 1994-03-04
   PRIOR APPLICATION NUMBER: US 08/159,184
   PRIOR FILING DATE: 1993-11-29
   PRIOR APPLICATION NUMBER: US 08/073,205
   PRIOR FILING DATE: 1993-06-04
   PRIOR APPLICATION NUMBER: US 08/027,146
  PRIOR FILING DATE: 1993-03-05
  NUMBER OF SEQ ID NOS: 2479
   SOFTWARE: PatentIn version 3.1
; SEO ID NO 59
   LENGTH: 11
    TYPE: PRT
    ORGANISM: Artificial Sequence
    FEATURE:
    OTHER INFORMATION: Artificial Peptide
US-10-149-135-59
  Query Match
                          27.3%; Score 3; DB 12; Length 11;
  Best Local Similarity 100.0%; Pred. No. 1.1e+04;
  Matches
           3; Conservative
                                0; Mismatches
                                                 0; Indels
                                                                 0; Gaps
                                                                             0;
Qу
            3 SRK 5
              \pm 1.1
            2 SRK 4
RESULT 52
US-10-149-135-83
; Sequence 83, Application US/10149135
; Publication No. US20040053822A1
; GENERAL INFORMATION:
; APPLICANT: Fikes, John
; APPLICANT: Sette, Alessandro
; APPLICANT: Sidney, John
```

US-10-149-135-59

```
APPLICANT:
               Southwood, Scott
  APPLICANT:
               Chesnut, Robert
               Celis, Esteban
   APPLICANT:
   APPLICANT: Keogh, Elissa
   TITLE OF INVENTION: Inducing Cellular Immune Responses to
   TITLE OF INVENTION: MAGE2/3 Using Peptide and Nucleic Acid Compositions
   FILE REFERENCE: 2060.0130001
   CURRENT APPLICATION NUMBER: US/10/149,135
   CURRENT FILING DATE: 2000-12-11
   PRIOR APPLICATION NUMBER: PCT/US00/33545
   PRIOR FILING DATE: 2000-12-11
   PRIOR APPLICATION NUMBER: US 09/458,298
;
   PRIOR FILING DATE: 1999-12-10
   PRIOR APPLICATION NUMBER: US 09/189,702
   PRIOR FILING DATE: 1998-11-10
   PRIOR APPLICATION NUMBER: US 08/205,713
   PRIOR FILING DATE: 1994-03-04
   PRIOR APPLICATION NUMBER: US 08/159,184
   PRIOR FILING DATE: 1993-11-29
   PRIOR APPLICATION NUMBER: US 08/073,205
  PRIOR FILING DATE: 1993-06-04
   PRIOR APPLICATION NUMBER: US 08/027,146
   PRIOR FILING DATE: 1993-03-05
  NUMBER OF SEQ ID NOS: 2479
  SOFTWARE: PatentIn version 3.1
; SEQ ID NO 83
   LENGTH: 11
    TYPE: PRT
    ORGANISM: Artificial Sequence
    FEATURE:
    OTHER INFORMATION: Artificial Peptide
US-10-149-135-83
  Query Match
                          27.3%; Score 3; DB 12; Length 11;
  Best Local Similarity
                          100.0%; Pred. No. 1.1e+04;
  Matches
             3; Conservative
                                0; Mismatches
                                                      Indels
                                                                     Gaps
                                                                              0;
            3 SRK 5
Qу
              111
Db
            4 SRK 6
RESULT 53
US-10-149-135-217
; Sequence 217, Application US/10149135
; Publication No. US20040053822A1
; GENERAL INFORMATION:
  APPLICANT: Fikes, John
  APPLICANT:
              Sette, Alessandro
  APPLICANT:
               Sidney, John
  APPLICANT:
               Southwood, Scott
  APPLICANT:
              Chesnut, Robert
;
  APPLICANT:
              Celis, Esteban
  APPLICANT: Keogh, Elissa
  TITLE OF INVENTION: Inducing Cellular Immune Responses to
  TITLE OF INVENTION: MAGE2/3 Using Peptide and Nucleic Acid Compositions
  FILE REFERENCE: 2060.0130001
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CURRENT APPLICATION NUMBER: US/10/149,135
  CURRENT FILING DATE: 2000-12-11
  PRIOR APPLICATION NUMBER: PCT/US00/33545
  PRIOR FILING DATE: 2000-12-11
  PRIOR APPLICATION NUMBER: US 09/458,298
; PRIOR FILING DATE: 1999-12-10
; PRIOR APPLICATION NUMBER: US 09/189,702
; PRIOR FILING DATE: 1998-11-10
; PRIOR APPLICATION NUMBER: US 08/205,713
; PRIOR FILING DATE: 1994-03-04
  PRIOR APPLICATION NUMBER: US 08/159,184
  PRIOR FILING DATE: 1993-11-29
  PRIOR APPLICATION NUMBER: US 08/073,205
  PRIOR FILING DATE: 1993-06-04
  PRIOR APPLICATION NUMBER: US 08/027,146
  PRIOR FILING DATE: 1993-03-05
 NUMBER OF SEQ ID NOS: 2479
  SOFTWARE: PatentIn version 3.1
; SEQ ID NO 217
   LENGTH: 11
   TYPE: PRT
;
   ORGANISM: Artificial Sequence
   FEATURE:
   OTHER INFORMATION: Artificial Peptide
US-10-149-135-217
 Query Match
                         27.3%; Score 3; DB 12; Length 11;
  Best Local Similarity 100.0%; Pred. No. 1.1e+04;
           3; Conservative 0; Mismatches 0; Indels
                                                                    Gaps
           3 SRK 5
             111
Db
           5 SRK 7
RESULT 54
US-10-149-135-278
; Sequence 278, Application US/10149135
; Publication No. US20040053822A1
; GENERAL INFORMATION:
; APPLICANT: Fikes, John
 APPLICANT: Sette, Alessandro
 APPLICANT: Sidney, John
  APPLICANT: Southwood, Scott
;
;
  APPLICANT: Chesnut, Robert
  APPLICANT: Celis, Esteban
;
  APPLICANT: Keogh, Elissa
  TITLE OF INVENTION: Inducing Cellular Immune Responses to
  TITLE OF INVENTION: MAGE2/3 Using Peptide and Nucleic Acid Compositions
  FILE REFERENCE: 2060.0130001
  CURRENT APPLICATION NUMBER: US/10/149,135
  CURRENT FILING DATE: 2000-12-11
  PRIOR APPLICATION NUMBER: PCT/US00/33545
;
  PRIOR FILING DATE: 2000-12-11
;
; PRIOR APPLICATION NUMBER: US 09/458,298
  PRIOR FILING DATE: 1999-12-10
; PRIOR APPLICATION NUMBER: US 09/189,702
```

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PRIOR FILING DATE: 1998-11-10
  PRIOR APPLICATION NUMBER: US 08/205,713
  PRIOR FILING DATE: 1994-03-04
 PRIOR APPLICATION NUMBER: US 08/159,184
  PRIOR FILING DATE: 1993-11-29
  PRIOR APPLICATION NUMBER: US 08/073,205
  PRIOR FILING DATE: 1993-06-04
  PRIOR APPLICATION NUMBER: US 08/027,146
  PRIOR FILING DATE: 1993-03-05
  NUMBER OF SEQ ID NOS: 2479
 SOFTWARE: PatentIn version 3.1
; SEQ ID NO 278
   LENGTH: 11
   TYPE: PRT
   ORGANISM: Artificial Sequence
   FEATURE:
   OTHER INFORMATION: Artificial Peptide
US-10-149-135-278
                         27.3%; Score 3; DB 12; Length 11;
 Query Match
 Best Local Similarity 100.0%; Pred. No. 1.1e+04;
                              0; Mismatches 0; Indels
                                                                0; Gaps
                                                                            0:
 Matches 3; Conservative
           3 SRK 5
Qу
              IIII
            4 SRK 6
RESULT 55
US-10-149-135-406
; Sequence 406, Application US/10149135
; Publication No. US20040053822A1
; GENERAL INFORMATION:
 APPLICANT: Fikes, John
  APPLICANT: Sette, Alessandro
  APPLICANT: Sidney, John
  APPLICANT: Southwood, Scott
  APPLICANT: Chesnut, Robert
  APPLICANT: Celis, Esteban
  APPLICANT: Keogh, Elissa
  TITLE OF INVENTION: Inducing Cellular Immune Responses to
  TITLE OF INVENTION: MAGE2/3 Using Peptide and Nucleic Acid Compositions
  FILE REFERENCE: 2060.0130001
  CURRENT APPLICATION NUMBER: US/10/149,135
;
  CURRENT FILING DATE: 2000-12-11
;
   PRIOR APPLICATION NUMBER: PCT/US00/33545
   PRIOR FILING DATE: 2000-12-11
  PRIOR APPLICATION NUMBER: US 09/458,298
   PRIOR FILING DATE: 1999-12-10
   PRIOR APPLICATION NUMBER: US 09/189,702
   PRIOR FILING DATE: 1998-11-10
   PRIOR APPLICATION NUMBER: US 08/205,713
;
   PRIOR FILING DATE: 1994-03-04
  PRIOR APPLICATION NUMBER: US 08/159,184
 PRIOR FILING DATE: 1993-11-29
; PRIOR APPLICATION NUMBER: US 08/073,205
; PRIOR FILING DATE: 1993-06-04
```

```
PRIOR APPLICATION NUMBER: US 08/027,146
   PRIOR FILING DATE: 1993-03-05
   NUMBER OF SEQ ID NOS: 2479
   SOFTWARE: PatentIn version 3.1
; SEQ ID NO 406
    LENGTH: 11
    TYPE: PRT
    ORGANISM: Artificial Sequence
    FEATURE:
    OTHER INFORMATION: Artificial Peptide
US-10-149-135-406
  Query Match
                          27.3%; Score 3; DB 12; Length 11;
  Best Local Similarity
                          100.0%; Pred. No. 1.1e+04;
             3; Conservative
                                0; Mismatches
                                                   0;
                                                      Indels
                                                                 0; Gaps
                                                                             0:
            8 SSL 10
Qу
              Db
            5 SSL 7
RESULT 56
US-10-149-135-409
; Sequence 409, Application US/10149135
; Publication No. US20040053822A1
; GENERAL INFORMATION:
  APPLICANT: Fikes, John
  APPLICANT: Sette, Alessandro
  APPLICANT:
              Sidney, John
;
              Southwood, Scott
  APPLICANT:
  APPLICANT: Chesnut, Robert
  APPLICANT:
              Celis, Esteban
  APPLICANT:
              Keogh, Elissa
  TITLE OF INVENTION: Inducing Cellular Immune Responses to
  TITLE OF INVENTION: MAGE2/3 Using Peptide and Nucleic Acid Compositions
   FILE REFERENCE: 2060.0130001
   CURRENT APPLICATION NUMBER: US/10/149,135
  CURRENT FILING DATE: 2000-12-11
;
   PRIOR APPLICATION NUMBER: PCT/US00/33545
   PRIOR FILING DATE: 2000-12-11
   PRIOR APPLICATION NUMBER: US 09/458,298
   PRIOR FILING DATE: 1999-12-10
   PRIOR APPLICATION NUMBER: US 09/189,702
   PRIOR FILING DATE: 1998-11-10
   PRIOR APPLICATION NUMBER: US 08/205,713
   PRIOR FILING DATE: 1994-03-04
   PRIOR APPLICATION NUMBER: US 08/159,184
   PRIOR FILING DATE: 1993-11-29
   PRIOR APPLICATION NUMBER: US 08/073,205
   PRIOR FILING DATE: 1993-06-04
   PRIOR APPLICATION NUMBER: US 08/027,146
   PRIOR FILING DATE: 1993-03-05
  NUMBER OF SEQ ID NOS: 2479
   SOFTWARE: PatentIn version 3.1
; SEQ ID NO 409
   LENGTH: 11
   TYPE: PRT
```

```
FEATURE:
   OTHER INFORMATION: Artificial Peptide
US-10-149-135-409
                         27.3%; Score 3; DB 12; Length 11;
 Query Match
 Best Local Similarity 100.0%; Pred. No. 1.1e+04;
                                                                             0;
           3; Conservative 0; Mismatches 0; Indels
                                                                0;
                                                                    Gaps
           8 SSL 10
Qу
             +111
           9 SSL 11
RESULT 57
US-10-149-135-414
; Sequence 414, Application US/10149135
; Publication No. US20040053822A1
; GENERAL INFORMATION:
  APPLICANT: Fikes, John
; APPLICANT: Sette, Alessandro
  APPLICANT: Sidney, John
  APPLICANT: Southwood, Scott
  APPLICANT: Chesnut, Robert
  APPLICANT: Celis, Esteban
  APPLICANT: Keogh, Elissa
  TITLE OF INVENTION: Inducing Cellular Immune Responses to
  TITLE OF INVENTION: MAGE2/3 Using Peptide and Nucleic Acid Compositions
  FILE REFERENCE: 2060.0130001
  CURRENT APPLICATION NUMBER: US/10/149,135
  CURRENT FILING DATE: 2000-12-11
   PRIOR APPLICATION NUMBER: PCT/US00/33545
   PRIOR FILING DATE: 2000-12-11
  PRIOR APPLICATION NUMBER: US 09/458,298
  PRIOR FILING DATE: 1999-12-10
   PRIOR APPLICATION NUMBER: US 09/189,702
   PRIOR FILING DATE: 1998-11-10
   PRIOR APPLICATION NUMBER: US 08/205,713
   PRIOR FILING DATE: 1994-03-04
   PRIOR APPLICATION NUMBER: US 08/159,184
   PRIOR FILING DATE: 1993-11-29
   PRIOR APPLICATION NUMBER: US 08/073,205
  PRIOR FILING DATE: 1993-06-04
   PRIOR APPLICATION NUMBER: US 08/027,146
   PRIOR FILING DATE: 1993-03-05
   NUMBER OF SEQ ID NOS: 2479
   SOFTWARE: PatentIn version 3.1
; SEQ ID NO 414
   LENGTH: 11
    TYPE: PRT
    ORGANISM: Artificial Sequence
    FEATURE:
    OTHER INFORMATION: Artificial Peptide
US-10-149-135-414
  Query Match
                          27.3%; Score 3; DB 12; Length 11;
  Best Local Similarity 100.0%; Pred. No. 1.1e+04;
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ORGANISM: Artificial Sequence

```
Matches
          3; Conservative 0; Mismatches
                                                   0; Indels
                                                                 0; Gaps
                                                                             0;
            3 SRK 5
Qу
              Db
            5 SRK 7
RESULT 58
US-10-149-135-469
; Sequence 469, Application US/10149135
; Publication No. US20040053822A1
; GENERAL INFORMATION:
  APPLICANT: Fikes, John
  APPLICANT: Sette, Alessandro
  APPLICANT: Sidney, John
  APPLICANT: Southwood, Scott
  APPLICANT: Chesnut, Robert
              Celis, Esteban
  APPLICANT:
  APPLICANT: Keogh, Elissa
   TITLE OF INVENTION: Inducing Cellular Immune Responses to
  TITLE OF INVENTION: MAGE2/3 Using Peptide and Nucleic Acid Compositions
  FILE REFERENCE: 2060.0130001
  CURRENT APPLICATION NUMBER: US/10/149,135
  CURRENT FILING DATE: 2000-12-11
  PRIOR APPLICATION NUMBER: PCT/US00/33545
  PRIOR FILING DATE: 2000-12-11
  PRIOR APPLICATION NUMBER: US 09/458,298
  PRIOR FILING DATE: 1999-12-10
   PRIOR APPLICATION NUMBER: US 09/189,702
   PRIOR FILING DATE: 1998-11-10
   PRIOR APPLICATION NUMBER: US 08/205,713
  PRIOR FILING DATE: 1994-03-04
  PRIOR APPLICATION NUMBER: US 08/159,184
  PRIOR FILING DATE: 1993-11-29
  PRIOR APPLICATION NUMBER: US 08/073,205
  PRIOR FILING DATE: 1993-06-04
  PRIOR APPLICATION NUMBER: US 08/027,146
  PRIOR FILING DATE: 1993-03-05
  NUMBER OF SEQ ID NOS: 2479
  SOFTWARE: PatentIn version 3.1
; SEQ ID NO 469
   LENGTH: 11
   TYPE: PRT
   ORGANISM: Artificial Sequence
   OTHER INFORMATION: Artificial Peptide
US-10-149-135-469
  Query Match
                         27.3%; Score 3; DB 12; Length 11;
  Best Local Similarity
                         100.0%; Pred. No. 1.1e+04;
 Matches
            3; Conservative
                              0; Mismatches 0;
                                                     Indels
                                                                0; Gaps
           3 SRK 5
Qу
             -111
```

Db

9 SRK 11

```
RESULT 59
US-10-149-135-506
; Sequence 506, Application US/10149135
; Publication No. US20040053822A1
; GENERAL INFORMATION:
; APPLICANT: Fikes, John
; APPLICANT: Sette, Alessandro
  APPLICANT:
              Sidney, John
  APPLICANT:
              Southwood, Scott
              Chesnut, Robert
  APPLICANT:
              Celis, Esteban
  APPLICANT:
  APPLICANT: Keogh, Elissa
  TITLE OF INVENTION: Inducing Cellular Immune Responses to
  TITLE OF INVENTION: MAGE2/3 Using Peptide and Nucleic Acid Compositions
  FILE REFERENCE: 2060.0130001
  CURRENT APPLICATION NUMBER: US/10/149,135
  CURRENT FILING DATE: 2000-12-11
  PRIOR APPLICATION NUMBER: PCT/US00/33545
  PRIOR FILING DATE: 2000-12-11
  PRIOR APPLICATION NUMBER: US 09/458,298
  PRIOR FILING DATE: 1999-12-10
  PRIOR APPLICATION NUMBER: US 09/189,702
  PRIOR FILING DATE: 1998-11-10
  PRIOR APPLICATION NUMBER: US 08/205,713
   PRIOR FILING DATE: 1994-03-04
  PRIOR APPLICATION NUMBER: US 08/159,184
  PRIOR FILING DATE: 1993-11-29
  PRIOR APPLICATION NUMBER: US 08/073,205
  PRIOR FILING DATE: 1993-06-04
  PRIOR APPLICATION NUMBER: US 08/027,146
  PRIOR FILING DATE: 1993-03-05
  NUMBER OF SEQ ID NOS: 2479
  SOFTWARE: PatentIn version 3.1
; SEQ ID NO 506
   LENGTH: 11
   TYPE: PRT
   ORGANISM: Artificial Sequence
   FEATURE:
   OTHER INFORMATION: Artificial Peptide
US-10-149-135-506
  Query Match
                          27.3%;
                                  Score 3; DB 12; Length 11;
  Best Local Similarity
                          100.0%; Pred. No. 1.1e+04;
 Matches
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                               0; Mismatches
                                                 0; Indels
                                                                 0; Gaps
                                                                             0;
Qу
            3 SRK 5
              111
            9 SRK 11
Db
RESULT 60
US-10-149-135-699
; Sequence 699, Application US/10149135
; Publication No. US20040053822A1
; GENERAL INFORMATION:
; APPLICANT: Fikes, John
; APPLICANT: Sette, Alessandro
```

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APPLICANT: Sidney, John
  APPLICANT: Southwood, Scott
              Chesnut, Robert
  APPLICANT:
              Celis, Esteban
  APPLICANT:
  APPLICANT: Keogh, Elissa
   TITLE OF INVENTION: Inducing Cellular Immune Responses to
  TITLE OF INVENTION: MAGE2/3 Using Peptide and Nucleic Acid Compositions
   FILE REFERENCE: 2060.0130001
   CURRENT APPLICATION NUMBER: US/10/149,135
   CURRENT FILING DATE: 2000-12-11
   PRIOR APPLICATION NUMBER: PCT/US00/33545
   PRIOR FILING DATE: 2000-12-11
   PRIOR APPLICATION NUMBER: US 09/458,298
   PRIOR FILING DATE: 1999-12-10
   PRIOR APPLICATION NUMBER: US 09/189,702
   PRIOR FILING DATE: 1998-11-10
   PRIOR APPLICATION NUMBER: US 08/205,713
  PRIOR FILING DATE: 1994-03-04
   PRIOR APPLICATION NUMBER: US 08/159,184
   PRIOR FILING DATE: 1993-11-29
   PRIOR APPLICATION NUMBER: US 08/073,205
   PRIOR FILING DATE: 1993-06-04
   PRIOR APPLICATION NUMBER: US 08/027,146
  PRIOR FILING DATE: 1993-03-05
  NUMBER OF SEQ ID NOS: 2479
  SOFTWARE: PatentIn version 3.1
 SEQ ID NO 699
   LENGTH: 11
   TYPE: PRT
   ORGANISM: Artificial Sequence
    FEATURE:
   OTHER INFORMATION: Artificial Peptide
US-10-149-135-699
 Query Match
                          27.3%; Score 3; DB 12; Length 11;
  Best Local Similarity
                         100.0%; Pred. No. 1.1e+04;
 Matches
            3; Conservative
                              0; Mismatches 0;
                                                     Indels
                                                                0; Gaps
                                                                            0;
            8 SSL 10
Qу
             \perp
Db
            7 SSL 9
RESULT 61
US-10-149-135-738
; Sequence 738, Application US/10149135
; Publication No. US20040053822A1
; GENERAL INFORMATION:
 APPLICANT: Fikes, John
  APPLICANT:
              Sette, Alessandro
  APPLICANT: Sidney, John
  APPLICANT: Southwood, Scott
  APPLICANT:
              Chesnut, Robert
  APPLICANT: Celis, Esteban
  APPLICANT: Keogh, Elissa
  TITLE OF INVENTION: Inducing Cellular Immune Responses to
  TITLE OF INVENTION: MAGE2/3 Using Peptide and Nucleic Acid Compositions
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FILE REFERENCE: 2060.0130001
   CURRENT APPLICATION NUMBER: US/10/149,135
  CURRENT FILING DATE: 2000-12-11
   PRIOR APPLICATION NUMBER: PCT/US00/33545
  PRIOR FILING DATE: 2000-12-11
  PRIOR APPLICATION NUMBER: US 09/458,298
  PRIOR FILING DATE: 1999-12-10
   PRIOR APPLICATION NUMBER: US 09/189,702
  PRIOR FILING DATE: 1998-11-10
  PRIOR APPLICATION NUMBER: US 08/205,713
   PRIOR FILING DATE: 1994-03-04
   PRIOR APPLICATION NUMBER: US 08/159,184
   PRIOR FILING DATE: 1993-11-29
   PRIOR APPLICATION NUMBER: US 08/073,205
   PRIOR FILING DATE: 1993-06-04
   PRIOR APPLICATION NUMBER: US 08/027,146
  PRIOR FILING DATE: 1993-03-05
  NUMBER OF SEQ ID NOS: 2479
  SOFTWARE: PatentIn version 3.1
; SEQ ID NO 738
   LENGTH: 11
   TYPE: PRT
   ORGANISM: Artificial Sequence
    FEATURE:
   OTHER INFORMATION: Artificial Peptide
US-10-149-135-738
  Query Match
                          27.3%; Score 3; DB 12; Length 11;
  Best Local Similarity
                          100.0%; Pred. No. 1.1e+04;
             3; Conservative
                                0; Mismatches
                                                  0;
                                                       Indels
                                                                 0;
                                                                              0;
                                                                     Gaps
            8 SSL 10
Qy
              \pm 11
            9 SSL 11
RESULT 62
US-10-149-135-843
; Sequence 843, Application US/10149135
; Publication No. US20040053822A1
; GENERAL INFORMATION:
  APPLICANT: Fikes, John
  APPLICANT: Sette, Alessandro
  APPLICANT:
               Sidney, John
  APPLICANT:
               Southwood, Scott
  APPLICANT:
               Chesnut, Robert
  APPLICANT:
               Celis, Esteban
  APPLICANT:
               Keogh, Elissa
  TITLE OF INVENTION: Inducing Cellular Immune Responses to
  TITLE OF INVENTION: MAGE2/3 Using Peptide and Nucleic Acid Compositions
  FILE REFERENCE: 2060.0130001
  CURRENT APPLICATION NUMBER: US/10/149,135
  CURRENT FILING DATE: 2000-12-11
  PRIOR APPLICATION NUMBER: PCT/US00/33545
  PRIOR FILING DATE: 2000-12-11
  PRIOR APPLICATION NUMBER: US 09/458,298
  PRIOR FILING DATE: 1999-12-10
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PRIOR APPLICATION NUMBER: US 09/189,702
   PRIOR FILING DATE: 1998-11-10
   PRIOR APPLICATION NUMBER: US 08/205,713
  PRIOR FILING DATE: 1994-03-04
  PRIOR APPLICATION NUMBER: US 08/159,184
  PRIOR FILING DATE: 1993-11-29
  PRIOR APPLICATION NUMBER: US 08/073,205
  PRIOR FILING DATE: 1993-06-04
  PRIOR APPLICATION NUMBER: US 08/027,146
  PRIOR FILING DATE: 1993-03-05
  NUMBER OF SEQ ID NOS: 2479
  SOFTWARE: PatentIn version 3.1
 SEQ ID NO 843
   LENGTH: 11
   TYPE: PRT
   ORGANISM: Artificial Sequence
   FEATURE:
   OTHER INFORMATION: Artificial Peptide
US-10-149-135-843
  Query Match
                          27.3%; Score 3; DB 12; Length 11;
  Best Local Similarity
                         100.0%; Pred. No. 1.1e+04;
          3; Conservative
                                 0; Mismatches
                                                0; Indels
                                                                 0; Gaps
                                                                             0;
           8 SSL 10
Qу
              111
            9 SSL 11
Db
RESULT 63
US-10-149-135-878
; Sequence 878, Application US/10149135
; Publication No. US20040053822A1
; GENERAL INFORMATION:
  APPLICANT: Fikes, John
  APPLICANT: Sette, Alessandro
              Sidney, John
  APPLICANT:
  APPLICANT: Southwood, Scott
;
  APPLICANT: Chesnut, Robert
  APPLICANT:
              Celis, Esteban
  APPLICANT: Keogh, Elissa
  TITLE OF INVENTION: Inducing Cellular Immune Responses to
  TITLE OF INVENTION: MAGE2/3 Using Peptide and Nucleic Acid Compositions
  FILE REFERENCE: 2060.0130001
  CURRENT APPLICATION NUMBER: US/10/149,135
  CURRENT FILING DATE: 2000-12-11
  PRIOR APPLICATION NUMBER: PCT/US00/33545
  PRIOR FILING DATE: 2000-12-11
   PRIOR APPLICATION NUMBER: US 09/458,298
  PRIOR FILING DATE: 1999-12-10
  PRIOR APPLICATION NUMBER: US 09/189,702
  PRIOR FILING DATE: 1998-11-10
  PRIOR APPLICATION NUMBER: US 08/205,713
  PRIOR FILING DATE: 1994-03-04
  PRIOR APPLICATION NUMBER: US 08/159,184
  PRIOR FILING DATE: 1993-11-29
  PRIOR APPLICATION NUMBER: US 08/073,205
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PRIOR FILING DATE: 1993-06-04
  PRIOR APPLICATION NUMBER: US 08/027,146
  PRIOR FILING DATE: 1993-03-05
  NUMBER OF SEQ ID NOS: 2479
  SOFTWARE: PatentIn version 3.1
; SEQ ID NO 878
   LENGTH: 11
   TYPE: PRT
   ORGANISM: Artificial Sequence
   FEATURE:
    OTHER INFORMATION: Artificial Peptide
US-10-149-135-878
 Query Match
                          27.3%; Score 3; DB 12; Length 11;
  Best Local Similarity 100.0%; Pred. No. 1.1e+04;
                              0; Mismatches
            3; Conservative
                                                0; Indels
                                                                 0; Gaps
                                                                             0;
            3 SRK 5
Qу
              111
Db
            1 SRK 3
RESULT 64
US-10-149-135-903
; Sequence 903, Application US/10149135
; Publication No. US20040053822A1
; GENERAL INFORMATION:
  APPLICANT: Fikes, John
  APPLICANT: Sette, Alessandro
  APPLICANT: Sidney, John
  APPLICANT: Southwood, Scott
  APPLICANT: Chesnut, Robert
  APPLICANT: Celis, Esteban
  APPLICANT: Keogh, Elissa
  TITLE OF INVENTION: Inducing Cellular Immune Responses to
  TITLE OF INVENTION: MAGE2/3 Using Peptide and Nucleic Acid Compositions
  FILE REFERENCE: 2060.0130001
  CURRENT APPLICATION NUMBER: US/10/149,135
  CURRENT FILING DATE: 2000-12-11
  PRIOR APPLICATION NUMBER: PCT/US00/33545
  PRIOR FILING DATE: 2000-12-11
  PRIOR APPLICATION NUMBER: US 09/458,298
  PRIOR FILING DATE: 1999-12-10
  PRIOR APPLICATION NUMBER: US 09/189,702
  PRIOR FILING DATE: 1998-11-10
  PRIOR APPLICATION NUMBER: US 08/205,713
  PRIOR FILING DATE: 1994-03-04
  PRIOR APPLICATION NUMBER: US 08/159,184
  PRIOR FILING DATE: 1993-11-29
  PRIOR APPLICATION NUMBER: US 08/073,205
  PRIOR FILING DATE: 1993-06-04
  PRIOR APPLICATION NUMBER: US 08/027,146
  PRIOR FILING DATE: 1993-03-05
  NUMBER OF SEQ ID NOS: 2479
;
  SOFTWARE: PatentIn version 3.1
; SEQ ID NO 903
   LENGTH: 11
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TYPE: PRT
   ORGANISM: Artificial Sequence
   FEATURE:
   OTHER INFORMATION: Artificial Peptide
US-10-149-135-903
                         27.3%; Score 3; DB 12; Length 11;
  Query Match
  Best Local Similarity 100.0%; Pred. No. 1.1e+04;
                              0; Mismatches
 Matches
           3; Conservative
                                                0; Indels
                                                                0; Gaps
                                                                            0;
           8 SSL 10
Qу
             -111
           5 SSL 7
RESULT 65
US-10-149-135-905
; Sequence 905, Application US/10149135
; Publication No. US20040053822A1
; GENERAL INFORMATION:
; APPLICANT: Fikes, John
; APPLICANT: Sette, Alessandro
; APPLICANT: Sidney, John
; APPLICANT: Southwood, Scott
; APPLICANT: Chesnut, Robert
  APPLICANT: Celis, Esteban
  APPLICANT: Keogh, Elissa
  TITLE OF INVENTION: Inducing Cellular Immune Responses to
  TITLE OF INVENTION: MAGE2/3 Using Peptide and Nucleic Acid Compositions
; FILE REFERENCE: 2060.0130001
; CURRENT APPLICATION NUMBER: US/10/149,135
  CURRENT FILING DATE: 2000-12-11
  PRIOR APPLICATION NUMBER: PCT/US00/33545
; PRIOR FILING DATE: 2000-12-11
  PRIOR APPLICATION NUMBER: US 09/458,298 ·
  PRIOR FILING DATE: 1999-12-10
  PRIOR APPLICATION NUMBER: US 09/189,702
  PRIOR FILING DATE: 1998-11-10
; PRIOR APPLICATION NUMBER: US 08/205,713
; PRIOR FILING DATE: 1994-03-04
  PRIOR APPLICATION NUMBER: US 08/159,184
; PRIOR FILING DATE: 1993-11-29
; PRIOR APPLICATION NUMBER: US 08/073,205
  PRIOR FILING DATE: 1993-06-04
  PRIOR APPLICATION NUMBER: US 08/027,146
  PRIOR FILING DATE: 1993-03-05
; NUMBER OF SEQ ID NOS: 2479
 SOFTWARE: PatentIn version 3.1
; SEQ ID NO 905
   LENGTH: 11
   TYPE: PRT
   ORGANISM: Artificial Sequence
   FEATURE:
   OTHER INFORMATION: Artificial Peptide
US-10-149-135-905
 Query Match
                     27.3%; Score 3; DB 12; Length 11;
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```
Best Local Similarity 100.0%; Pred. No. 1.1e+04;
            3; Conservative 0; Mismatches 0; Indels 0; Gaps
                                                                           0;
            3 SRK 5
Qу
             111
            1 SRK 3
Db
RESULT 66
US-10-149-135-912
; Sequence 912, Application US/10149135
; Publication No. US20040053822A1
; GENERAL INFORMATION:
; APPLICANT: Fikes, John
; APPLICANT: Sette, Alessandro
; APPLICANT: Sidney, John
  APPLICANT: Southwood, Scott
  APPLICANT: Chesnut, Robert
  APPLICANT: Celis, Esteban
  APPLICANT: Keogh, Elissa
  TITLE OF INVENTION: Inducing Cellular Immune Responses to
  TITLE OF INVENTION: MAGE2/3 Using Peptide and Nucleic Acid Compositions
   FILE REFERENCE: 2060.0130001
   CURRENT APPLICATION NUMBER: US/10/149,135
   CURRENT FILING DATE: 2000-12-11
   PRIOR APPLICATION NUMBER: PCT/US00/33545
   PRIOR FILING DATE: 2000-12-11
   PRIOR APPLICATION NUMBER: US 09/458,298
   PRIOR FILING DATE: 1999-12-10
   PRIOR APPLICATION NUMBER: US 09/189,702
  PRIOR FILING DATE: 1998-11-10
  PRIOR APPLICATION NUMBER: US 08/205,713
  PRIOR FILING DATE: 1994-03-04
  PRIOR APPLICATION NUMBER: US 08/159,184
  PRIOR FILING DATE: 1993-11-29
  PRIOR APPLICATION NUMBER: US 08/073,205
  PRIOR FILING DATE: 1993-06-04
  PRIOR APPLICATION NUMBER: US 08/027,146
; PRIOR FILING DATE: 1993-03-05
; NUMBER OF SEQ ID NOS: 2479
  SOFTWARE: PatentIn version 3.1
; SEQ ID NO 912
   LENGTH: 11
   TYPE: PRT
   ORGANISM: Artificial Sequence
   FEATURE:
   OTHER INFORMATION: Artificial Peptide
US-10-149-135-912
  Query Match
                         27.3%; Score 3; DB 12; Length 11;
  Best Local Similarity 100.0%; Pred. No. 1.1e+04;
 Matches
           3; Conservative 0; Mismatches 0; Indels 0; Gaps
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Qу
           3 SRK 5
             111
Db
           4 SRK 6
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RESULT 67
US-10-149-135-948
; Sequence 948, Application US/10149135
; Publication No. US20040053822A1
; GENERAL INFORMATION:
; APPLICANT: Fikes, John
; APPLICANT: Sette, Alessandro
  APPLICANT: Sidney, John
  APPLICANT: Southwood, Scott
  APPLICANT:
              Chesnut, Robert
  APPLICANT: Celis, Esteban
  APPLICANT: Keogh, Elissa
  TITLE OF INVENTION: Inducing Cellular Immune Responses to
  TITLE OF INVENTION: MAGE2/3 Using Peptide and Nucleic Acid Compositions
  FILE REFERENCE: 2060.0130001
  CURRENT APPLICATION NUMBER: US/10/149,135
  CURRENT FILING DATE: 2000-12-11
  PRIOR APPLICATION NUMBER: PCT/US00/33545
  PRIOR FILING DATE: 2000-12-11
  PRIOR APPLICATION NUMBER: US 09/458,298
;
  PRIOR FILING DATE: 1999-12-10
  PRIOR APPLICATION NUMBER: US 09/189,702
  PRIOR FILING DATE: 1998-11-10
  PRIOR APPLICATION NUMBER: US 08/205,713
  PRIOR FILING DATE: 1994-03-04
  PRIOR APPLICATION NUMBER: US 08/159,184
  PRIOR FILING DATE: 1993-11-29
  PRIOR APPLICATION NUMBER: US 08/073,205
  PRIOR FILING DATE: 1993-06-04
  PRIOR APPLICATION NUMBER: US 08/027,146
  PRIOR FILING DATE: 1993-03-05
  NUMBER OF SEO ID NOS: 2479
  SOFTWARE: PatentIn version 3.1
; SEQ ID NO 948
   LENGTH: 11
   TYPE: PRT
   ORGANISM: Artificial Sequence
   FEATURE:
   OTHER INFORMATION: Artificial Peptide
US-10-149-135-948
 Query Match
                         27.3%; Score 3; DB 12; Length 11;
 Best Local Similarity 100.0%; Pred. No. 1.1e+04;
 Matches
           3; Conservative
                               0; Mismatches
                                                0;
                                                     Indels
                                                                0; Gaps
                                                                             0;
           3 SRK 5
Qу
             Db
           2 SRK 4
RESULT 68
US-10-149-135-961
; Sequence 961, Application US/10149135
; Publication No. US20040053822A1
; GENERAL INFORMATION:
; APPLICANT: Fikes, John
```

```
APPLICANT: Sette, Alessandro
  APPLICANT: Sidney, John
  APPLICANT: Southwood, Scott
  APPLICANT: Chesnut, Robert
  APPLICANT: Celis, Esteban
  APPLICANT: Keogh, Elissa
  TITLE OF INVENTION: Inducing Cellular Immune Responses to
  TITLE OF INVENTION: MAGE2/3 Using Peptide and Nucleic Acid Compositions
  FILE REFERENCE: 2060.0130001
  CURRENT APPLICATION NUMBER: US/10/149,135
  CURRENT FILING DATE: 2000-12-11
  PRIOR APPLICATION NUMBER: PCT/US00/33545
  PRIOR FILING DATE: 2000-12-11
  PRIOR APPLICATION NUMBER: US 09/458,298
  PRIOR FILING DATE: 1999-12-10
  PRIOR APPLICATION NUMBER: US 09/189,702
  PRIOR FILING DATE: 1998-11-10
  PRIOR APPLICATION NUMBER: US 08/205,713
  PRIOR FILING DATE: 1994-03-04
  PRIOR APPLICATION NUMBER: US 08/159,184
  PRIOR FILING DATE: 1993-11-29
  PRIOR APPLICATION NUMBER: US 08/073,205
  PRIOR FILING DATE: 1993-06-04
  PRIOR APPLICATION NUMBER: US 08/027,146
  PRIOR FILING DATE: 1993-03-05
  NUMBER OF SEQ ID NOS: 2479
  SOFTWARE: PatentIn version 3.1
; SEQ ID NO 961
   LENGTH: 11
   TYPE: PRT
;
   ORGANISM: Artificial Sequence
   OTHER INFORMATION: Artificial Peptide
US-10-149-135-961
                          27.3%; Score 3; DB 12; Length 11;
  Query Match
  Best Local Similarity
                         100.0%; Pred. No. 1.1e+04;
            3; Conservative 0; Mismatches 0; Indels
                                                                 0; Gaps
                                                                             0;
Qу
           3 SRK 5
             | | | |
Db
            5 SRK 7
RESULT 69
US-10-149-135-991
; Sequence 991, Application US/10149135
; Publication No. US20040053822A1
; GENERAL INFORMATION:
  APPLICANT: Fikes, John
              Sette, Alessandro
  APPLICANT:
  APPLICANT: Sidney, John
  APPLICANT:
              Southwood, Scott
  APPLICANT: Chesnut, Robert
; APPLICANT: Celis, Esteban
; APPLICANT:
               Keogh, Elissa
  TITLE OF INVENTION: Inducing Cellular Immune Responses to
```

```
TITLE OF INVENTION: MAGE2/3 Using Peptide and Nucleic Acid Compositions
   FILE REFERENCE: 2060.0130001
   CURRENT APPLICATION NUMBER: US/10/149,135
   CURRENT FILING DATE: 2000-12-11
   PRIOR APPLICATION NUMBER: PCT/US00/33545
   PRIOR FILING DATE: 2000-12-11
   PRIOR APPLICATION NUMBER: US 09/458,298
   PRIOR FILING DATE: 1999-12-10
   PRIOR APPLICATION NUMBER: US 09/189,702
   PRIOR FILING DATE: 1998-11-10
   PRIOR APPLICATION NUMBER: US 08/205,713
   PRIOR FILING DATE: 1994-03-04
   PRIOR APPLICATION NUMBER: US 08/159,184
   PRIOR FILING DATE: 1993-11-29
   PRIOR APPLICATION NUMBER: US 08/073,205
   PRIOR FILING DATE: 1993-06-04
   PRIOR APPLICATION NUMBER: US 08/027,146
   PRIOR FILING DATE: 1993-03-05
  NUMBER OF SEQ ID NOS: 2479
   SOFTWARE: PatentIn version 3.1
; SEQ ID NO 991
   LENGTH: 11
    TYPE: PRT
    ORGANISM: Artificial Sequence
    FEATURE:
    OTHER INFORMATION: Artificial Peptide
US-10-149-135-991
  Query Match
                          27.3%; Score 3; DB 12; Length 11;
  Best Local Similarity
                          100.0%; Pred. No. 1.1e+04;
 Matches
           3; Conservative
                                0; Mismatches
                                                  0;
                                                       Indels
                                                                  0; Gaps
            3 SRK 5
Qy
              \perp \perp \perp
Db
            4 SRK 6
RESULT 70
US-10-149-135-999
; Sequence 999, Application US/10149135
; Publication No. US20040053822A1
; GENERAL INFORMATION:
  APPLICANT: Fikes, John
  APPLICANT:
               Sette, Alessandro
  APPLICANT:
               Sidney, John
  APPLICANT:
               Southwood, Scott
  APPLICANT:
               Chesnut, Robert
  APPLICANT:
               Celis, Esteban
  APPLICANT:
               Keogh, Elissa
  TITLE OF INVENTION: Inducing Cellular Immune Responses to
  TITLE OF INVENTION: MAGE2/3 Using Peptide and Nucleic Acid Compositions
   FILE REFERENCE: 2060.0130001
  CURRENT APPLICATION NUMBER: US/10/149,135
  CURRENT FILING DATE: 2000-12-11
  PRIOR APPLICATION NUMBER: PCT/US00/33545
; PRIOR FILING DATE: 2000-12-11
   PRIOR APPLICATION NUMBER: US 09/458,298
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PRIOR FILING DATE: 1999-12-10
  PRIOR APPLICATION NUMBER: US 09/189,702
   PRIOR FILING DATE: 1998-11-10
   PRIOR APPLICATION NUMBER: US 08/205,713
   PRIOR FILING DATE: 1994-03-04
   PRIOR APPLICATION NUMBER: US 08/159,184
   PRIOR FILING DATE: 1993-11-29
   PRIOR APPLICATION NUMBER: US 08/073,205
   PRIOR FILING DATE: 1993-06-04
   PRIOR APPLICATION NUMBER: US 08/027,146
   PRIOR FILING DATE: 1993-03-05
   NUMBER OF SEQ ID NOS: 2479
  SOFTWARE: PatentIn version 3.1
; SEQ ID NO 999
   LENGTH: 11
    TYPE: PRT
    ORGANISM: Artificial Sequence
    FEATURE:
    OTHER INFORMATION: Artificial Peptide
US-10-149-135-999
  Query Match
                          27.3%; Score 3; DB 12; Length 11;
  Best Local Similarity 100.0%; Pred. No. 1.1e+04;
            3; Conservative 0; Mismatches
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                                                        Indels
                                                                  0; Gaps
                                                                              0;
            8 SSL 10
Qу
              \parallel \parallel \parallel \parallel
            3 SSL 5
Db
RESULT 71
US-10-149-135-1018
; Sequence 1018, Application US/10149135
; Publication No. US20040053822A1
; GENERAL INFORMATION:
  APPLICANT: Fikes, John
  APPLICANT: Sette, Alessandro
; APPLICANT: Sidney, John
; APPLICANT: Southwood, Scott
; APPLICANT: Chesnut, Robert
   APPLICANT: Celis, Esteban
   APPLICANT: Keogh, Elissa
   TITLE OF INVENTION: Inducing Cellular Immune Responses to
   TITLE OF INVENTION: MAGE2/3 Using Peptide and Nucleic Acid Compositions
   FILE REFERENCE: 2060.0130001
   CURRENT APPLICATION NUMBER: US/10/149,135
   CURRENT FILING DATE: 2000-12-11
   PRIOR APPLICATION NUMBER: PCT/US00/33545
   PRIOR FILING DATE: 2000-12-11
   PRIOR APPLICATION NUMBER: US 09/458,298
   PRIOR FILING DATE: 1999-12-10
   PRIOR APPLICATION NUMBER: US 09/189,702
   PRIOR FILING DATE: 1998-11-10
   PRIOR APPLICATION NUMBER: US 08/205,713
   PRIOR FILING DATE: 1994-03-04
   PRIOR APPLICATION NUMBER: US 08/159,184
   PRIOR FILING DATE: 1993-11-29
```

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PRIOR APPLICATION NUMBER: US 08/073,205
   PRIOR FILING DATE: 1993-06-04
   PRIOR APPLICATION NUMBER: US 08/027,146
   PRIOR FILING DATE: 1993-03-05
   NUMBER OF SEQ ID NOS: 2479
   SOFTWARE: PatentIn version 3.1
; SEQ ID NO 1018
    LENGTH: 11
    TYPE: PRT
    ORGANISM: Artificial Sequence
    FEATURE:
    OTHER INFORMATION: Artificial Peptide
US-10-149-135-1018
  Query Match
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                                  Score 3; DB 12; Length 11;
  Best Local Similarity
                          100.0%; Pred. No. 1.1e+04;
  Matches
             3; Conservative
                               0; Mismatches
                                                   0;
                                                       Indels
                                                                  0; Gaps
                                                                              0;
            8 SSL 10
Qу
              Db
            6 SSL 8
RESULT 72
US-10-149-135-1020
; Sequence 1020, Application US/10149135
; Publication No. US20040053822A1
; GENERAL INFORMATION:
  APPLICANT: Fikes, John
              Sette, Alessandro
  APPLICANT:
  APPLICANT:
              Sidney, John
  APPLICANT:
              Southwood, Scott
              Chesnut, Robert
  APPLICANT:
  APPLICANT:
              Celis, Esteban
  APPLICANT: Keogh, Elissa
  TITLE OF INVENTION: Inducing Cellular Immune Responses to
  TITLE OF INVENTION: MAGE2/3 Using Peptide and Nucleic Acid Compositions
  FILE REFERENCE: 2060.0130001
  CURRENT APPLICATION NUMBER: US/10/149,135
  CURRENT FILING DATE: 2000-12-11
  PRIOR APPLICATION NUMBER: PCT/US00/33545
   PRIOR FILING DATE: 2000-12-11
  PRIOR APPLICATION NUMBER: US 09/458,298
   PRIOR FILING DATE: 1999-12-10
  PRIOR APPLICATION NUMBER: US 09/189,702
   PRIOR FILING DATE: 1998-11-10
;
   PRIOR APPLICATION NUMBER: US 08/205,713
   PRIOR FILING DATE: 1994-03-04
   PRIOR APPLICATION NUMBER: US 08/159,184
   PRIOR FILING DATE: 1993-11-29
  PRIOR APPLICATION NUMBER: US 08/073,205
  PRIOR FILING DATE: 1993-06-04
  PRIOR APPLICATION NUMBER: US 08/027,146
  PRIOR FILING DATE: 1993-03-05
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  SOFTWARE: PatentIn version 3.1
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; Publication No. US20040053822A1
; GENERAL INFORMATION:
; APPLICANT: Fikes, John
  APPLICANT: Sette, Alessandro
  APPLICANT: Sidney, John
  APPLICANT: Southwood, Scott
  APPLICANT:
              Chesnut, Robert
              Celis, Esteban
  APPLICANT:
  APPLICANT: Keogh, Elissa
  TITLE OF INVENTION: Inducing Cellular Immune Responses to
  TITLE OF INVENTION: MAGE2/3 Using Peptide and Nucleic Acid Compositions
  FILE REFERENCE: 2060.0130001
  CURRENT APPLICATION NUMBER: US/10/149,135
  CURRENT FILING DATE: 2000-12-11
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  PRIOR APPLICATION NUMBER: US 09/189,702
  PRIOR FILING DATE: 1998-11-10
  PRIOR APPLICATION NUMBER: US 08/205,713
  PRIOR FILING DATE: 1994-03-04
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  PRIOR FILING DATE: 1993-11-29
  PRIOR APPLICATION NUMBER: US 08/073,205
  PRIOR FILING DATE: 1993-06-04
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  APPLICANT: Sette, Alessandro
  APPLICANT: Sidney, John
  APPLICANT: Southwood, Scott
  APPLICANT: Chesnut, Robert
  APPLICANT: Celis, Esteban
APPLICANT: Keogh, Elissa
  TITLE OF INVENTION: Inducing Cellular Immune Responses to
  TITLE OF INVENTION: MAGE2/3 Using Peptide and Nucleic Acid Compositions
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  PRIOR FILING DATE: 1998-11-10
  PRIOR APPLICATION NUMBER: US 08/205,713
  PRIOR FILING DATE: 1994-03-04
  PRIOR APPLICATION NUMBER: US 08/159,184
  PRIOR FILING DATE: 1993-11-29
  PRIOR APPLICATION NUMBER: US 08/073,205
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   APPLICANT:
               Southwood, Scott
   APPLICANT:
   APPLICANT:
               Chesnut, Robert
              Celis, Esteban
   APPLICANT:
   APPLICANT: Keogh, Elissa
   TITLE OF INVENTION: Inducing Cellular Immune Responses to
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   CURRENT APPLICATION NUMBER: US/10/149,135
   CURRENT FILING DATE: 2000-12-11
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   PRIOR FILING DATE: 2000-12-11
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   PRIOR FILING DATE: 1999-12-10
   PRIOR APPLICATION NUMBER: US 09/189,702
   PRIOR FILING DATE: 1998-11-10
   PRIOR APPLICATION NUMBER: US 08/205,713
   PRIOR FILING DATE: 1994-03-04
   PRIOR APPLICATION NUMBER: US 08/159,184
   PRIOR FILING DATE: 1993-11-29
   PRIOR APPLICATION NUMBER: US 08/073,205
   PRIOR FILING DATE: 1993-06-04
   PRIOR APPLICATION NUMBER: US 08/027,146
   PRIOR FILING DATE: 1993-03-05
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Qу
              \Pi
Db
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Search completed: April 8, 2004, 16:35:50

Job time : 31.3077 secs

## GenCore version 5.1.6 Copyright (c) 1993 - 2004 Compugen Ltd.

OM protein - protein search, using sw model

Run on: April 8, 2004, 15:30:07; Search time 27.7692 Seconds

(without alignments)

124.984 Million cell updates/sec

Title: US-09-787-443A-21

Perfect score: 11

Sequence: 1 AKSRKGNSSLM 11

Scoring table: OLIGO

Gapop 60.0 , Gapext 60.0

Searched: 1017041 seqs, 315518202 residues

Word size: (

Total number of hits satisfying chosen parameters: 460

Minimum DB seq length: 11 Maximum DB seq length: 11

Post-processing: Listing first 100 summaries

Database: SPTREMBL 25:\*

1: sp archea:\*

2: sp bacteria:\*

3: sp fungi:\*

4: sp human:\*

5: sp\_invertebrate:\*

6: sp\_mammal:\*

7: sp\_mhc:\*

8: sp\_organelle:\*

9: sp\_phage:\*

10: sp\_plant:\*

11: sp\_rodent:\*

12: sp virus:\*

13: sp\_vertebrate:\*

14: sp\_unclassified:\*

15: sp\_rvirus:\*

16: sp\_bacteriap:\*

17: sp archeap:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

## SUMMARIES

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4	3	27.3	11	8	Q9G616		Q9q616	ceratophora
5	3	27.3	11	8	Q9G610			lyriocephal
6	3	27.3	11	8	Q9G619			ceratophora
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9	3	27.3	11	8	Q9G613		Q9g613	cophotis ce
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12	2	18.2	11	2	Q9R790			borrelia ga
13	2	18.2	11	2	Q47602			escherichia
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34	2	18.2	11	5	Q26092			pisaster oc
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73 74	2	18.2	11	8	Q8WD17		Q8wd17 ctenophorus
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7 <i>1</i> 78	2	18.2	11	8	Q32704 Q8MES1		Q8mes1 alyogyne pi
70 79	2	18.2	11	8	Q8MES1		Q8mep3 hibiscus no
80	2	18.2	11	8	Q8MEQ7		Q8meq7 hibiscus dr
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84 85	2	18.2	11	8	Q8MES3 Q9G658		Q9g658 hydrosaurus
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94	2	18.2	11	10	Q8RV30		Q8rv30 zea mays (m
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96	2	18.2			082070		
97	2	18.2	11	10	Q94IR5		Q94ir5 pinus radia
98	2	18.2	11	10	Q04131		Q04131 lycopersico
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01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
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     Hansson K., Sundstrom L., Pelletier A., Roy P.H.;
     "Sequence and function of the second type of integron in Tn7.";
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     "Unique insertion site of Tn7 in the E. coli chromosome.";
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     Nature 297:601-603(1982).
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     Simonsen C.C., Chen E.Y., Levinson A.D.;
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     "Identification of the type I trimethoprim-resistant dihydrofolate
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     reductase specified by the Escherichia coli R-plasmid R483: Comparison
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     J. Bacteriol. 155:1001-1008(1983).
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     Fling M.E., Richards C.;
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     Brown J.M., Firtel R.A.;
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     "Functional and regulatory analysis of the Dictyostelium G-box binding
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     Dev. Biol. 234:521-534(2001).
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     structural features illustrated with acrodont lizards.";
     Syst. Biol. 49:257-277(2000).
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     Pethiyagoda R., Rastegar-Pouyani N., Papenfuss T.J.;
RA
     "Evaluating Trans-Tethys migration: An example using Acrodont lizard
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     phylogenetics.";
RL
     Syst. Biol. 49:233-256(2000).
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KW
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     structural features illustrated with acrodont lizards.";
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RA
RA
     Pethiyagoda R., Rastegar-Pouyani N., Papenfuss T.J.;
RT
     "Evaluating Trans-Tethys migration: An example using Acrodont lizard
RT
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     Syst. Biol. 49:233-256(2000).
RL
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RP
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     MEDLINE=21655505; PubMed=11796034;
RA
     Schulte J.A. II, Macey J.R., Pethiyagoda R., Larson A.;
RT
     "Rostral Horn Evolution among Agamid Lizards of the Genus Ceratophora
RT
     Endemic to Sri Lanka.";
     Mol. Phylogenet. Evol. 22:111-117(2002).
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FT
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DT
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DT
     01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
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GN
OS
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OG
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OC
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RT
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RA
     "Evaluating Trans-Tethys migration: An example using Acrodont lizard
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RT
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     Syst. Biol. 49:233-256(2000).
RL
RN
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     Schulte J.A. II, Macey J.R., Pethiyagoda R., Larson A.;
RA
     "Rostral Horn Evolution among Agamid Lizards of the Genus Ceratophora
RT
     Endemic to Sri Lanka.";
RT
RL
     Mol. Phylogenet. Evol. 22:111-117(2002).
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Db

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DT
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DT
     Cytochrome c oxidase subunit I (Fragment).
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GN
OS
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OG
     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC
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OC
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RA
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RT
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     Syst. Biol. 49:257-277(2000).
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RA
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DT
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DT
     01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
DE
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OG
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OC
OC
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RA
RT
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RT
RL
     Syst. Biol. 49:257-277(2000).
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     Schulte J.A. II, Macey J.R., Pethiyagoda R., Larson A.;
RA
     "Rostral Horn Evolution among Agamid Lizards of the Genus Ceratophora
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RТ
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Qy
              IIII
Db
            2 SSL 4
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AC
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DT
     01-MAR-2002 (TrEMBLrel. 20, Last sequence update)
DΤ
     01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
DT
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DE
GN
OS
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OG
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OC
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RT
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Mol. Phylogenet. Evol. 22:111-117(2002).
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  Matches
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              \mathbf{I}
Db
            2 SSL 4
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DT
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DT
DT
     01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
DΕ
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GN
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os
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ОG
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OC
     Lepidosauria; Squamata; Iquania; Acrodonta; Agamidae; Draconinae;
OC
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RA
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RA
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RT
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DT
     01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
DT
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GN
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os
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OC
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RT
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RT
     Syst. Biol. 49:257-277(2000).
RL
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RA
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RT
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Qу
              111
Db
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     01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
DT
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RT
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     genomic structural features illustrated with acrodont lizards.";
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RL
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RA
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RT
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FT
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Qy
              \perp
Db
            2 SSL 4
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DT
     01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
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DΕ
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OS
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OC
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RC
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RX
     Tilly K., Casjens S., Stevenson B., Bono J.L., Samuels D.S., Hogan D.,
RA
RA
     Rosa P.;
     "he Borrelia burgdorferi circular plasmid cp26: conservation of
RT
     plasmid structure and targeted inactivation of the ospC gene.";
RT
RL
     Mol. Microbiol. 25:361-374(1997).
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DR
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DR
     GO; GO:0006952; P:defense response; IEA.
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Qу
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DE
GN
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OS
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OC
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OC
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     Tao T., Bourne J.C., Blumenthal R.M.;
RA
     "A family of regulatory genes associated with type II restriction-
RT
     modification systems.";
RT
     J. Bacteriol. 173:1367-1375(1991).
RL
     EMBL; M63620; AAA24558.1; -.
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 Matches
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Qу
              11
            2 SR 3
Db
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01-NOV-1998 (TrEMBLrel. 08, Last annotation update)
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GN
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OC
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OC
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OX
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     MEDLINE=97206151; PubMed=9157244;
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     Tyndall C., Lehnherr H., Sandmeier U., Kulik E., Bickle T.A.;
RA ·
     "The type IC had loci of the enterobacteria are flanked by DNA with
RT
RT
     high homology to the phage Pl genome: implications for the evolution
     and spread of DNA restriction systems.";
RT
    Mol. Microbiol. 23:729-736(1997).
RL
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Qу
              \perp
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Db
RESULT 15
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DΕ
GN
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OS
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OC
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OC
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OX.
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RN -
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RΡ
RC
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     Hedegaard J., Kristensen J.E., Nakamura Y., Sperling-Petersen H.U.,
RA
RA
     Mortensen K.K.;
RT
     "Sequence of the infB gene from Escherichia coli strain IQ489 and
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RT
     Submitted (FEB-1999) to the EMBL/GenBank/DDBJ databases.
DR
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1 AK 2
Qу
              | | |
            2 AK 3
Db
RESULT 16
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     01-NOV-1996 (TrEMBLrel. 01, Last sequence update)
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     01-DEC-2001 (TrEMBLrel. 19, Last annotation update)
DT
DE
     REase protein (Fragment).
GN
     REASE.
os
     Escherichia coli.
     Bacteria; Proteobacteria; Gammaproteobacteria; Enterobacteriales;
OC
     Enterobacteriaceae; Escherichia.
OC
OX
     NCBI TaxID=562;
RN
     [1]
RP
     SEQUENCE FROM N.A.
     MEDLINE=91139577; PubMed=1995588;
RX
     Tao T., Bourne J.C., Blumenthal R.M.;
RA
RТ
     "A family of regulatory genes associated with type II restriction-
     modification systems.";
RT
     J. Bacteriol. 173:1367-1375(1991).
RL
     EMBL; M63619; AAA24556.1; -.
DR
     NON TER
FT
                  11
                         11
     SEQUENCE
                        1232 MW; 63175479572AB5A4 CRC64;
SO
                11 AA;
  Query Match
                          18.2%; Score 2; DB 2; Length 11;
  Best Local Similarity
                          100.0%; Pred. No. 1.1e+05;
                Conservative
                                  0; Mismatches
                                                    0;
                                                        Indels
                                                                   0; Gaps
                                                                                0;
             2;
            9 SL 10
Qу
              11
Db
            2 SL 3
RESULT 17
Q8RMI8
                                    PRT;
                                            11 AA.
ID
     Q8RMI8
                 PRELIMINARY;
AC
     Q8RMI8;
     01-JUN-2002 (TrEMBLrel. 21, Created)
DT
     01-JUN-2002 (TrEMBLrel. 21, Last sequence update)
DT
DT
     01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
DΕ
     ErmB (Fragment).
     ERMB.
GN
OS
     Enterococcus hirae.
     Plasmid pMKH1.
OG
     Bacteria; Firmicutes; Lactobacillales; Enterococcaceae; Enterococcus.
OC
OX
     NCBI TaxID=1354;
RN
RP
     SEQUENCE FROM N.A.
     Borgen K., Sorum M., Wasteson Y., Kruse H., Oppegaard H.;
RA
     "Genetic linkage between ermB and vanA in Enterococcus hirae of
RT
RT
     poultry origin.";
```

```
Submitted (MAR-2002) to the EMBL/GenBank/DDBJ databases.
RL
     EMBL; AF493942; AAM18554.1; -.
DR
     GO; GO:0046821; C:extrachromosomal DNA; IEA.
DR
KW
     Plasmid.
     NON TER
FT
                   1
                          1
                                  08A7A8AA49C7273B CRC64;
     SEQUENCE
                11 AA; 1359 MW;
SO
                          18.2%; Score 2; DB 2;
                                                    Length 11;
                          100.0%; Pred. No. 1.1e+05;
  Best Local Similarity
             2; Conservative 0; Mismatches
                                                    0;
                                                                               0;
  Matches
                                                        Indels
                                                                  0:
                                                                      Gaps
Qy
            4 RK 5
              \mathbf{I}
Db
           10 RK 11
RESULT 18
P71228
                 PRELIMINARY;
                                   PRT;
                                            11 AA.
ID
     P71228
AC
     P71228;
     01-FEB-1997 (TrEMBLrel. 02, Created)
DT
     01-JUL-1997 (TrEMBLrel. 04, Last sequence update)
DT
     01-MAR-2003 (TrEMBLrel. 23, Last annotation update)
DT
DE
     Nitrate/nitrite sensor transmitter (Fragment).
GN
     NARO.
     Escherichia coli.
OS
     Bacteria; Proteobacteria; Gammaproteobacteria; Enterobacteriales;
OC
OC
     Enterobacteriaceae; Escherichia.
     NCBI TaxID=562;
OX
RN
     [1]
     SEQUENCE FROM N.A.
RP
RC
     STRAIN=K-12;
     MEDLINE=92374842; PubMed=1508040;
RX
     Chiang R.C., Cavicchioli R., Gunsalus R.P.;
RA
     "Identification and characterization of narQ, a second nitrate sensor
RT
     for nitrate-dependent gene regulation in Escherichia coli.";
RT
     Mol. Microbiol. 6:1913-1923(1992).
RL
RN
     [2]
RP
     SEQUENCE FROM N.A.
RC
     STRAIN=K-12;
RX
     MEDLINE=97113461; PubMed=8955321;
     Cavicchioli R., Kolesnikow T., Chiang R.C., Gunsalus R.P.;
RA
     "Characterization of the aegA locus of Escherichia coli: control of
RT
     gene expression in response to anaerobiosis and nitrate.";
RT
RL
     J. Bacteriol. 178:6968-6974(1996).
DR
     EMBL; L34011; AAB46943.1; -.
FT
     NON TER
                  11
                         11
     SEQUENCE
                11 AA; 1200 MW; 52E1CFFCA2D77403 CRC64;
SQ
  Query Match
                          18.2%; Score 2; DB 2; Length 11;
                          100.0%; Pred. No. 1.1e+05;
  Best Local Similarity
                                                                               0;
             2; Conservative
                                 0; Mismatches
                                                    0; Indels
                                                                   0; Gaps
  Matches
            9 SL 10
Qy
              11
Db
           10 SL 11
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RESULT 19
P95518
                 PRELIMINARY;
                                    PRT;
                                            11 AA.
ID
     P95518
AC
     P95518;
     01-MAY-1997 (TrEMBLrel. 03, Created)
DT
     01-MAY-1997 (TrEMBLrel. 03, Last sequence update)
DT
     01-DEC-2001 (TrEMBLrel. 19, Last annotation update)
DT
     Ribosomal protein RpsA (Fragment).
DE
GN
     RPSA.
     Pasteurella haemolytica.
OS
     Bacteria; Proteobacteria; Gammaproteobacteria; Pasteurellales;
OC
     Pasteurellaceae; Mannheimia.
OC
     NCBI TaxID=75985;
OX
RN
RΡ
     SEQUENCE FROM N.A.
RC
     STRAIN=PHL101;
RX
     MEDLINE=97164347; PubMed=9011038;
     Highlander S.K., Garza O., Brown B.J., Koby S., Oppenheim A.B.;
RA
     "Isolation and characterization of the integration host factor genes
RT
     of Pasteurella haemolytica.";
RT
     FEMS Microbiol. Lett. 146:181-188(1997).
RL
     EMBL; U56139; AAC44845.1; -.
DR
FT
     NON TER
                   1
                          1
                11 AA; 1168 MW; 7A4BFD38D339CDDB CRC64;
     SEQUENCE
SQ
                          18.2%; Score 2; DB 2; Length 11;
  Query Match
                          100.0%; Pred. No. 1.1e+05;
  Best Local Similarity
  Matches
             2; Conservative
                                0; Mismatches
                                                    0;
                                                        Indels
                                                                   0; Gaps
            1 AK 2
Qy
              1.1
            8 AK 9
Db
RESULT 20
047345
ID
     047345
                 PRELIMINARY;
                                    PRT;
                                            11 AA.
AC
     047345;
     01-NOV-1996 (TrEMBLrel. 01, Created)
DT
     01-NOV-1996 (TrEMBLrel. 01, Last sequence update)
DT
DT
     01-DEC-2001 (TrEMBLrel. 19, Last annotation update)
DE
     Leader peptide.
     Escherichia coli.
OS
OC
     Bacteria; Proteobacteria; Gammaproteobacteria; Enterobacteriales;
OC
     Enterobacteriaceae; Escherichia.
OX
     NCBI TaxID=562;
RN
     [1]
     SEQUENCE FROM N.A.
RP
     STRAIN=K12;
RC
     Faber F., van Giezen M., Van Gorcom R.F.M., Harder W.;
RA
     "Identification of two Escherichia coli K12 proteins which are induced
RT
     in response to pollutant stress.";
RT
RL
     Submitted (APR-1996) to the EMBL/GenBank/DDBJ databases.
RN
RP
     SEQUENCE OF 2-11 FROM N.A.
RC
     STRAIN=K12;
```

```
MEDLINE=85134883; PubMed=6396419;
RX
     Hudson G.S., Davidson B.E.;
RA
     "Nucleotide sequence and transcription of the phenylalanine and
RT
     tyrosine operons of Escherichia coli K12.";
RT
     J. Mol. Biol. 180:1023-1051(1984).
RL
     EMBL; Z70523; CAA94435.1; -.
DR
               11 AA; 1402 MW; 87AB199204141775 CRC64;
     SEQUENCE
SQ
                                                   Length 11;
  Query Match
                          18.2%; Score 2; DB 2;
                          100.0%; Pred. No. 1.1e+05;
  Best Local Similarity
                                0; Mismatches
                                                   0; Indels
                                                                  0; Gaps
                                                                              0;
           2; Conservative
            7 NS 8
Qу
              \Box
            3 NS 4
Db
RESULT 21
Q47420
                                   PRT;
                                           11 AA.
ID
     Q47420
                 PRELIMINARY;
AC
     047420;
DT
     01-NOV-1996 (TrEMBLrel. 01, Created)
DT
     01-NOV-1996 (TrEMBLrel. 01, Last sequence update)
     01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
DT
DΕ
     ORF11 protein.
     Escherichia coli.
OS
     Bacteria; Proteobacteria; Gammaproteobacteria; Enterobacteriales;
OC
     Enterobacteriaceae; Escherichia.
OC
OX
     NCBI TaxID=562;
RN
     [1]
     SEQUENCE FROM N.A.
RP
RC
     STRAIN=K12;
     MEDLINE=92041688; PubMed=1657895;
RX
     Sharples G.J., Lloyd R.G.;
RA
     "Resolution of Holliday junctions in Escherichia coli: Identification
RT
     of the ruvC gene product as a 19-Kilodalton protein.";
RT
     J. Bacteriol. 173:7711-7715(1991).
RL
     EMBL; X59551; CAA42127.1; -.
DR
     PIR; S19015; S19015.
DR
               11 AA; 1215 MW; DD8D6D4D56C6D33D CRC64;
     SEQUENCE
SO
                          18.2%; Score 2; DB 2;
                                                   Length 11;
  Best Local Similarity
                          100.0%; Pred. No. 1.1e+05;
             2; Conservative
                                0; Mismatches
                                                   0;
                                                       Indels
                                                                  0:
                                                                      Gaps
  Matches
Qy
            1 AK 2
              11
Db
            4 AK 5
RESULT 22
Q56413
                 PRELIMINARY;
                                   PRT;
                                           11 AA.
ΙD
     Q56413
AC
     Q56413;
DT
     01-NOV-1996 (TrEMBLrel. 01, Created)
DT
     01-NOV-1996 (TrEMBLrel. 01, Last sequence update)
     01-DEC-2001 (TrEMBLrel. 19, Last annotation update)
DT
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```
IS602L region DNA, 5' end (Fragment).
DE
     Escherichia coli.
OS
     Bacteria; Proteobacteria; Gammaproteobacteria; Enterobacteriales;
OC
OC
     Enterobacteriaceae; Escherichia.
     NCBI TaxID=562;
OX
RN
     [1]
RP
     SEQUENCE FROM N.A.
RC
    TRANSPOSON=Transposon Tn602;
    MEDLINE=87318208; PubMed=2819910;
RX
RA
     Stibitz S., Davies J.E.;
     "Tn602: A naturally occurring relative of Tn903 with direct repeats.";
RT
RL
     Plasmid 17:202-209(1987).
     EMBL; M22735; AAA27464.1; -.
DR
FT
    NON TER
                  1
                         1
FT
     NON TER
                  11
                         11
SO
     SEQUENCE
               11 AA; 1361 MW; 447E8354A05339C3 CRC64;
                          18.2%; Score 2; DB 2; Length 11;
  Query Match
  Best Local Similarity 100.0%; Pred. No. 1.1e+05;
            2; Conservative
                                0; Mismatches
                                                   0; Indels
                                                                 0; Gaps
           1 AK 2
Qy .
             -1.1
           1 AK 2
RESULT 23
Q9R446
                 PRELIMINARY;
                                   PRT;
                                           11 AA.
ID
     Q9R446
AC
     Q9R446;
     01-MAY-2000 (TrEMBLrel. 13, Created)
DT
     01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
DT
     01-MAY-2000 (TrEMBLrel. 13, Last annotation update)
     Carbamoyl-phosphate synthase subunit A (Fragment).
DE
GN
     CARA.
     Neisseria gonorrhoeae.
os
     Bacteria; Proteobacteria; Betaproteobacteria; Neisseriales;
OC
     Neisseriaceae; Neisseria.
OC
     NCBI TaxID=485;
OX
RN
     [1]
RP
     SEQUENCE FROM N.A.
     STRAIN=MS11, and FA1090;
RC
     MEDLINE=95291461; PubMed=7773412;
RX
     Lawson F.S., Billowes F.M., Dillon J.A.;
RA
RT
     "Organization of carbamoyl-phosphate synthase genes in Neisseria
RT
     gonorrhoeae includes a large, variable intergenic sequence which is
RT
     also present in other Neisseria species.";
     Microbiology 141:0-0(0).
RL
RN
RP
     SEQUENCE FROM N.A.
     STRAIN=MS11, and FA1090;
RC
     Brinkman F.S.L., Francis F.M., Dillon J.R.;
RA
RT
     "Complexity of the variable sequence between the carbamoyl-phosphate
     synthase genes of Neisseria species.";
RT
RL
     Submitted (OCT-1997) to the EMBL/GenBank/DDBJ databases.
DR
     EMBL; AF029363; AAC78453.1; -.
DR
     EMBL; AF029362; AAC78452.1; -.
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NON TER
FT
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                           1
                                   0C07A8E3DDD33694 CRC64;
     SEQUENCE
                11 AA;
                        1178 MW;
SQ
                           18.2%; Score 2; DB 2; Length 11;
  Best Local Similarity
                           100.0%; Pred. No. 1.1e+05;
                               0; Mismatches
             2; Conservative
                                                     0;
                                                        Indels
                                                                                0;
 Matches
                                                                    0; Gaps
            1 AK 2
QУ
              11
            8 AK 9
Db
RESULT 24
Q14759
ID
     Q14759
                 PRELIMINARY;
                                    PRT;
                                            11 AA.
AC ·
     014759;
     01-NOV-1996 (TrEMBLrel. 01, Created)
DT
     01-NOV-1996 (TrEMBLrel. 01, Last sequence update)
DT
     01-DEC-2001 (TrEMBLrel. 19, Last annotation update)
DT
DE
     Lymphocyte cytosolic protein 2 (Fragment).
GN
     LCP2.
OS
     Homo sapiens (Human).
     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC
OC
     Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX
     NCBI TaxID=9606;
RN
     [1]
RP
     SEQUENCE FROM N.A.
     Sunden S.L.F., Carr L.L., Clements J.L, Motto D.G., Koretzky G.A.;
RA
     "Polymorphism in and localization of the gene encoding the 76 kDa SH2
RT
     domain-containing Leukocyte Protein (SLP-76) to chromosome 5q33.1-
RT
RT
     qter.";
     Genomics 0:0-0(1995).
RL
     EMBL; U44065; AAA93308.1; -.
DR
FT
     NON TER
                   1
                           1
     NON TER
                          11
FT
                  11
                                  D695104224072DDD CRC64;
     SEQUENCE
                11 AA; 1242 MW;
SO
  Query Match
                           18.2%; Score 2; DB 4; Length 11;
  Best Local Similarity
                           100.0%; Pred. No. 1.1e+05;
                                  0; Mismatches
                                                                                0;
  Matches
             2; Conservative
                                                    0; Indels
                                                                    0; Gaps
            4 RK 5
Qу
              \Pi
            7 RK 8
Db
RESULT 25
Q9UCP2
     Q9UCP2
                 PRELIMINARY;
                                    PRT;
                                             11 AA.
ID
AC
     Q9UCP2;
     01-MAY-2000 (TrEMBLrel. 13, Created)
DT
     01-MAY-2000 (TrEMBLrel. 13, Last sequence update) 01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
DT
DT
     cGMP-inhibited LOW K(M) cAMP phosphodiesterase PEAK 43, CGI-PDE
DE
DE
     (Fragment).
OS
     Homo sapiens (Human).
OC
     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
```

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Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OC
ΟX
    NCBI TaxID=9606;
RN
     [1]
RΡ
     SEQUENCE.
    MEDLINE=92283180; PubMed=1317779;
RX
     LeBon T.R., Kasuya J., Paxton R.J., Belfrage P., Hockman S.,
RA
    Manganiello V.C., Fujita Yamaguchi Y.;
RA
     "Purification and characterization of quanosine 3',5'-monophosphate-
RT
     inhibited low K(m) adenosine 3',5'-monophosphate phosphodiesterase
RT
     from human placental cytosolic fractions.";
RT
     Endocrinology 130:3265-3274(1992).
RL
DR
     GO; GO:0005829; C:cytosol; TAS.
     GO; GO:0004115; F:cAMP-specific phosphodiesterase activity; TAS.
DR
     GO; GO:0007165; P:signal transduction; NAS.
DR
FT
    NON TER
                  1
                         1
     NON TER
FT
                  11
                         11
     SEQUENCE
                11 AA; 1220 MW;
                                  7DF1FDF2D44735BB CRC64;
SQ
                          18.2%; Score 2; DB 4; Length 11;
  Query Match
                          100.0%; Pred. No. 1.1e+05;
  Best Local Similarity
 Matches
             2; Conservative
                                 0; Mismatches
                                                    0;
                                                        Indels
                                                                      Gaps
            9 SL 10
              11
            1 SL 2
Db
RESULT 26
Q9Y3G2
                                           11 AA.
                 PRELIMINARY;
                                   PRT:
ID
    Q9Y3G2
AC
     Q9Y3G2;
     01-NOV-1999 (TrEMBLrel. 12, Created)
\mathbf{DT}
     01-NOV-1999 (TrEMBLrel. 12, Last sequence update)
DT
     01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
DT
     LSFR2 protein (Fragment).
DE
GN
     LSFR2.
OS:
     Homo sapiens (Human).
     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC
    Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OC
OX
     NCBI TaxID=9606;
RN
     [1]
     SEOUENCE FROM N.A.
RP
    MEDLINE=99299247; PubMed=10369878;
RX
RA
     Gilley J., Fried M.;
RT
     "Extensive gene order differences within regions of conserved synteny
RT
     between the Fugu and human genomes: implications for chromosomal
RT
     volution and the cloning of disease genes.";
     Hum. Mol. Genet. 8:1313-1320(1999).
RL
     EMBL; Y17456; CAB44349.1; -.
DR
     NON TER
FT
                   1
                          1
     NON TER
FT
                  11
                         11
     SEQUENCE
                                  68C5E5D7A8772324 CRC64;
SQ
                11 AA; 1342 MW;
                          18.2%; Score 2; DB 4;
                                                   Length 11;
  Query Match
                          100.0%; Pred. No. 1.1e+05;
  Best Local Similarity
                                                                               0;
                                                                      Gaps
             2; Conservative
                                0; Mismatches
                                                    0; Indels
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4 RK 5
Qу
              4 RK 5
Dh
RESULT 27
016427
                 PRELIMINARY;
                                   PRT;
                                           11 AA.
     Q16427
AC
     016427;
     01-NOV-1996 (TrEMBLrel. 01, Created)
DT
     01-NOV-1996 (TrEMBLrel. 01, Last sequence update)
DT
     01-MAY-1999 (TrEMBLrel. 10, Last annotation update)
DT
     Dystrophin protein (Fragment).
DE
     DYSTROPHIN.
GN
OS
     Homo sapiens (Human).
     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC
     Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX
     NCBI TaxID=9606;
RN
     [1]
RP
     SEQUENCE FROM N.A.
     MEDLINE=96163501; PubMed=8566960;
RX
     Holder E., Maeda M., Bies R.D.;
RA
     "Expression and regulation of the dystrophin Purkinje promoter in
RT
     human skeletal muscle, heart, and brain.";
RT
     Hum. Genet. 97:232-239(1996).
RL
     EMBL; S81419; AAD14362.1; -.
DR
     NON TER
FT
                 11
                         11
     SEQUENCE
                11 AA; 1299 MW; DDCC84321AB5A5A2 CRC64;
SQ
  Query Match
                          18.2%; Score 2; DB 4; Length 11;
  Best Local Similarity 100.0%; Pred. No. 1.1e+05;
                                 0; Mismatches
                                                   0; Indels
                                                                              0;
  Matches 2; Conservative
                                                                  0; Gaps
            8 SS 9
Qy
              \Pi
            5 SS 6
Db
RESULT 28
075811
                                   PRT;
                                           11 AA.
ΙD
     075811
                 PRELIMINARY;
AC
     01-NOV-1998 (TrEMBLrel. 08, Created)
     01-NOV-1998 (TrEMBLrel. 08, Last sequence update)
DT
     01-NOV-1998 (TrEMBLrel. 08, Last annotation update)
DT
DE
     ErbB-3 R2 (Fragment).
GN
     C-ERBB-3.
     Homo sapiens (Human).
OS
     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC
     Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OC
     NCBI TaxID=9606;
OX
RN
     [1]
RP
     SEQUENCE FROM N.A.
RC
     TISSUE=Ovarian carcinoma;
     MEDLINE=98345147; PubMed=9681822;
RX
RA
     Lee H., Maihle N.J.;
     "Isolation and characterization of four alternate c-erbB3 transcripts
RT
```

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expressed in ovarian carcinoma-derived cell lines and normal human
RT
RT
     tissues.";
    Oncogene 16:3243-3252(1998).
RL
     EMBL; U88358; AAC39858.1; -.
DR
     NON TER
FT.
                   1
                          1
     SEQUENCE
                11 AA; 1017 MW;
                                 21B236366EB72878 CRC64;
SO
                          18.2%; Score 2; DB 4; Length 11;
 Query Match
                          100.0%; Pred. No. 1.1e+05;
 Best Local Similarity
            2; Conservative 0; Mismatches
                                                 0; Indels
                                                              0; Gaps
 Matches
            5 KG 6
Qу
              11
Db
            9 KG 10
RESULT 29
094785
ΙD
    094785
                 PRELIMINARY;
                                   PRT;
                                           11 AA.
AC
    094785;
     01-MAY-1999 (TrEMBLrel. 10, Created)
DT
     01-MAY-1999 (TrEMBLrel. 10, Last sequence update)
DT
DT
     01-MAY-1999 (TrEMBLrel. 10, Last annotation update)
    Thrombopoietin (Fragment).
DE
OS
    Homo sapiens (Human).
     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC
    Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OC
OX
    NCBI TaxID=9606;
RN
     [1]
     SEQUENCE FROM N.A.
RP
     Sasaki Y., Takahashi T., Nakamura K., Okuno Y., Nakao K.;
RA
     "Production of Thrombopoietin by Human Carcinomas and Its Novel mRNA
RT
     Isoforms.";
RT
     Submitted (MAY-1998) to the EMBL/GenBank/DDBJ databases.
RL
     EMBL; AB014683; BAA34932.1; -.
DR
     NON TER
FT
                   1
                          1
     SEQUENCE
                11 AA; 1203 MW; 5FE19F44B6C1A877 CRC64;
SQ
                          18.2%; Score 2; DB 4; Length 11;
 Query Match
 Best Local Similarity 100.0%; Pred. No. 1.1e+05;
          2; Conservative
                              0; Mismatches
                                                   0;
                                                     Indels
                                                                0; Gaps
                                                                             0;
 Matches
            9 SL 10
Qу
              1.1
            2 SL 3
Db
RESULT 30
Q16234
ΙD
     Q16234
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                                   PRT;
                                           11 AA.
AC
     Q16234;
DT
     01-NOV-1996 (TrEMBLrel. 01, Created)
DT
     01-NOV-1996 (TrEMBLrel. 01, Last sequence update)
     01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
DT
DE
     HuD protein (Fragment).
GN
     HUD.
OS
     Homo sapiens (Human).
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Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OC
    NCBI TaxID=9606;
OX
RN
     [1]
     SEQUENCE FROM N.A.
RP
RX
    MEDLINE=94349312; PubMed=8069866;
RA
     Sekido Y., Bader S.A., Carbone D.P., Johnson B.E., Minna J.D.;
RT
     "Molecular analysis of the HuD gene encoding a paraneoplastic
     encephalomyelitis antiqen in human lung cancer cell lines.";
RT
    Cancer Res. 54:4988-4992(1994).
RL
     EMBL; S73887; AAD14142.1; -.
DR
DR
     PIR; I52708; I52708.
FT
    NON TER
                 11
                         11
SO
     SEQUENCE
                11 AA; 1289 MW;
                                  2EDCF20E204415A7 CRC64;
 Query Match
                          18.2%; Score 2; DB 4; Length 11;
 Best Local Similarity 100.0%; Pred. No. 1.1e+05;
                                0; Mismatches
                                                   0;
                                                                              0;
 Matches
            2; Conservative
                                                       Indels
                                                                  0; Gaps
            3 SR 4
Qу
              11
            5 SR 6
Db
RESULT 31
COIN8O
                 PRELIMINARY;
                                   PRT;
                                           11 AA.
ID
     Q8NI03
AC
     Q8NI03;
DT
     01-OCT-2002 (TrEMBLrel. 22, Created)
     01-OCT-2002 (TrEMBLrel. 22, Last sequence update)
DΤ
     01-OCT-2002 (TrEMBLrel. 22, Last annotation update)
DT
     25 hydroxyvitamin d3 1-alpha hydroxylase (Fragment).
     Homo sapiens (Human).
OS
     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC
     Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OC
OX
     NCBI_TaxID=9606;
RN
     [1]
RP
     SEQUENCE FROM N.A.
     Ebert R., Schneider D., Jovanovic M., Adamski J., Jakob F.;
RA
     Submitted (APR-2002) to the EMBL/GenBank/DDBJ databases.
RL
DR
     EMBL; AF500480; AAM21669.1; -.
FT
     NON TER
                  11
                         11
     SEQUENCE
                        1298 MW; 82C14E84CB533731 CRC64;
SQ
                11 AA;
  Query Match
                          18.2%; Score 2; DB 4; Length 11;
                          100.0%; Pred. No. 1.1e+05;
  Best Local Similarity
  Matches
            2; Conservative
                              0; Mismatches
                                                   0;
                                                       Indels
                                                                  0;
                                                                      Gaps
                                                                              0;
            3 SR 4
Qу
              \mathbf{1}
            9 SR 10
Db
RESULT 32
Q8TDA8
ID
     Q8TDA8
                 PRELIMINARY;
                                   PRT;
                                           11 AA.
AC
     Q8TDA8;
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

OC

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01-JUN-2002 (TrEMBLrel. 21, Created)
DT
     01-JUN-2002 (TrEMBLrel. 21, Last sequence update)
DT
     01-JUN-2002 (TrEMBLrel. 21, Last annotation update)
DT
     Glutathione synthetase (Fragment).
DE
     Homo sapiens (Human).
OS
     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC
     Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OC
OX
     NCBI TaxID=9606;
RN
     [1]
     SEQUENCE FROM N.A.
RP
     Cho Y.-W., Lee Y.-Y., Lim C.-J.;
RA
     "Cloning and characterization of glutathione synthetase gene from
RT
RT
     human placenta DNA.";
     Submitted (FEB-2002) to the EMBL/GenBank/DDBJ databases.
RL
     EMBL; AF485789; AAL91591.1; -.
DR
     NON TER
FT
                  11
                         11
     SEQUENCE
                11 AA; 1235 MW;
                                 1CE28D1E35B86374 CRC64;
SQ
                          18.2%; Score 2; DB 4; Length 11;
  Query Match
                          100.0%; Pred. No. 1.1e+05;
  Best Local Similarity
                               0; Mismatches
                                                   0; Indels
  Matches
             2; Conservative
            9 SL 10
Qу
              11
            7 SL 8
Db
RESULT 33
Q9UAR8
                 PRELIMINARY;
                                   PRT;
                                           11 AA.
ID
     Q9UAR8
AC
     Q9UAR8;
     01-MAY-2000 (TrEMBLrel. 13, Created)
DT
     01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
     01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
DT
     Sialokinin I preproprotein (Fragment).
DE
     Aedes aegypti (Yellowfever mosquito).
OS
     Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;
OC
     Neoptera; Endopterygota; Diptera; Nematocera; Culicoidea; Aedes.
OC
     NCBI TaxID=7159;
OX
RN
     [1]
RP
     SEQUENCE FROM N.A.
     STRAIN=Rockefeller/Red; TISSUE=Salivary gland;
RC
     MEDLINE=20099025; PubMed=10620041;
RX
     Beerntsen B.T., Champagne D.E., Coleman J.L., Campos Y.A., James A.A.;
RA
     "Characterization of the Sialokinin I gene encoding the salivary
RT
RT
     vasodilator of the yellow fever mosquito, Aedes aegypti.";
     Insect Mol. Biol. 8:459-467(1999).
RL
     EMBL; AF108100; AAD16884.1; -.
DR
     GO; GO:0007268; P:synaptic transmission; IEA.
     GO; GO:0007217; P:tachykinin signaling pathway; IEA.
DR
     InterPro; IPR002040; Tachy Neurokinin.
DR
     PROSITE; PS00267; TACHYKININ; 1.
DR
FT
     NON TER
                11 AA; 1203 MW; 8BADC77C6B59C33A CRC64;
SQ
     SEQUENCE
                          18.2%; Score 2; DB 5; Length 11;
  Query Match
  Best Local Similarity 100.0%; Pred. No. 1.1e+05;
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0;
                                                        Indels
                                                                  0; Gaps
                                                                               0;
                                 0; Mismatches
  Matches
             2;
                 Conservative
           10 LM 11
Qу
              11
            9 LM 10
Db
RESULT 34
Q26092
                 PRELIMINARY;
                                   PRT;
                                            11 AA.
     Q26092
ID
AC
     026092;
     01-NOV-1996 (TrEMBLrel. 01, Created)
DT
     01-NOV-1996 (TrEMBLrel. 01, Last sequence update)
DT
     01-DEC-2001 (TrEMBLrel. 19, Last annotation update)
DT
     Sea StAR histone H2B gene 5'region (Fragment).
DΕ
OS
     Pisaster ochraceus (Sea star).
OC
     Eukaryota; Metazoa; Echinodermata; Eleutherozoa; Asterozoa;
     Asteroidea; Forcipulatacea; Forcipulatida; Asteriidae; Pisaster.
OC
     NCBI TaxID=7612;
OX
RN
     [1]
     SEQUENCE FROM N.A.
RP
RC
     TISSUE=Sperm;
     Howell A.M., Cool D., Hewitt J., Ydenberg B., Smith M.J., Honda B.M.;
RA
     "Organization and Unusual Expression of Histone Genes in the Sea Star
RT
     Pisaster ochraceus.";
RT
     J. Mol. Evol. 25:29-36(1987).
RL
     EMBL; X05619; CAA29106.1; -.
DR
     NON TER
FT
                  11
                         11
                11 AA; 1128 MW; 5173974A3865BDD3 CRC64;
     SEQUENCE
SO
                          18.2%; Score 2; DB 5; Length 11;
  Query Match
                          100.0%; Pred. No. 1.1e+05;
  Best Local Similarity
                                 0; Mismatches
                                                                               0;
                                                        Indels
                                                                  0; Gaps
            2; Conservative
                                                    0;
            5 KG 6.
Qу
              Db
            8 KG 9
RESULT 35
O9TWX6
                 PRELIMINARY;
                                    PRT:
                                            11 AA.
ID
     Q9TWX6
AC
     Q9TWX6;
     01-MAY-2000 (TrEMBLrel. 13, Created)
DT
     01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
DΤ
     01-JUN-2002 (TrEMBLrel. 21, Last annotation update)
DT
     Juvenile hormone binding protein, JHBP=12.5 kDa CNBR peptide
DE
DE
     (Fragment).
     Manduca sexta (Tobacco hawkmoth) (Tobacco hornworm).
OS
     Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;
OC
     Neoptera; Endopterygota; Lepidoptera; Glossata; Ditrysia; Sphingiodea;
OC
     Sphingidae; Sphinginae; Manduca.
OC
OX
     NCBI_TaxID=7130;
     [1]
RN
RP
     SEQUENCE.
     MEDLINE=92134256; PubMed=1734862;
RX
     Touhara K., Prestwich G.D.;
RA
```

```
"Binding site mapping of a photoaffinity-labeled juvenile hormone
RT
RT
     binding protein.";
     Biochem. Biophys. Res. Commun. 182:466-473(1992).
RL
FT
     NON TER
                   1
                         1
     NON TER
                  11
FT
                         11
                                  D232A98E705045BD CRC64;
     SEQUENCE
                11 AA;
                        1071 MW;
SO
                          18.2%; Score 2; DB 5; Length 11;
  Ouery Match
                          100.0%; Pred. No. 1.1e+05;
  Best Local Similarity
 Matches
             2; Conservative
                               0; Mismatches
                                                   0; Indels
                                                                      Gaps
                                                                  0:
Qу
            1 AK 2
              Db
           10 AK 11
RESULT 36
Q99292
                 PRELIMINARY;
                                   PRT;
                                           11 AA.
ID
     Q99292
AC
     099292;
     01-NOV-1996 (TrEMBLrel. 01, Created)
DT
     01-NOV-1996 (TrEMBLrel. 01, Last sequence update)
DT
     01-OCT-2003 (TrEMBLrel. 25, Last annotation update)
DT
DΕ
     Bicoid protein (Fragment).
GN
     BCD.
     Drosophila heteroneura (Fruit fly).
OS
     Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;
OC
     Neoptera; Endopterygota; Diptera; Brachycera; Muscomorpha;
OC
     Ephydroidea; Drosophilidae; Drosophila.
OC
     NCBI TaxID=32382;
OX
RN
     [1]
     SEQUENCE FROM N.A.
RP
     MEDLINE=91184004; PubMed=2081457;
     MacDonald P.M.;
RA
     "bicoid mRNA localization signal: phylogenetic conservation of
RT
     function and RNA secondary structure.";
RT
RL
     Development 110:161-171(1990).
     -!- FUNCTION: BICOID IS SEGMENT-POLARITY PROTEIN THAT PROVIDES
CC
         POSITIONAL CUES FOR THE DEVELOPMENT OF HEAD AND THORACIC SEGMENTS.
CC
         BCD REGULATES THE EXPRESSION OF ZYGOTIC GENES, POSSIBLY THROUGH
CC
         ITS HOMEODOMAIN, AND INHIBITS THE ACTIVITY OF OTHER MATERNAL GENE
CC
         PRODUCTS. IT IS POSSIBLE THAT BCD ALSO BINDS RNA.
CC
     EMBL; M32125; AAA28386.1; -.
DR
     FlyBase; FBqn0012352; Dhet\bcd.
DR
DR
     GO; GO:0005634; C:nucleus; IEA.
DR
     GO; GO:0003677; F:DNA binding; IEA.
     GO; GO:0003723; F:RNA binding; IEA.
DR
     GO; GO:0007275; P:development; IEA.
DR
     GO; GO:0006355; P:regulation of transcription, DNA-dependent; IEA.
     GO; GO:0007367; P:segment polarity determination; IEA.
DR
     DNA-binding; Developmental protein; Homeobox; Nuclear protein;
KW
     RNA-binding; Segmentation polarity protein; Transcription regulation.
KW
FT
     SEQUENCE
                11 AA; 1221 MW; 8CE802305DD9D6C1 CRC64;
SQ
                          18.2%; Score 2; DB 5; Length 11;
  Query Match
  Best Local Similarity 100.0%; Pred. No. 1.1e+05;
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0; Indels
                                                                  0; Gaps
                                                                              0;
             2; Conservative
                                0; Mismatches
 Matches
            6 GN 7
Qу
              | |
            2 GN 3
Db
RESULT 37
025916
                 PRELIMINARY;
                                   PRT;
                                            11 AA.
     025916
ID
АC
     025916;
     01-NOV-1996 (TrEMBLrel. 01, Created)
DT
     01-NOV-1996 (TrEMBLrel. 01, Last sequence update)
DT
     01-DEC-2001 (TrEMBLrel. 19, Last annotation update)
DΤ
     Malaria antigen (7H8/2) (Fragment).
DE
     Plasmodium falciparum.
OS
     Eukaryota; Alveolata; Apicomplexa; Haemosporida; Plasmodium.
OC
     NCBI TaxID=5833;
OX
RN
     [1]
RP
     SEQUENCE FROM N.A.
RX
     MEDLINE=91164876; PubMed=1706114;
     Limpaiboon T., Taylor D., Jones G., Geysen H.M., Saul A.;
RA
RT
     "Characterization of a Plasmodium falciparum epitope recognized by a
     monoclonal antibody with broad isolate and species specificity.";
RT
     Southeast Asian J. Trop. Med. Public Health 21:388-396(1990).
RL
     EMBL; M31305; AAA29645.1; -.
DR
FT
     NON TER
                   1
                          1
                11 AA; 1415 MW; DB03D3BC42C33699 CRC64;
     SEQUENCE
SQ
                          18.2%; Score 2; DB 5; Length 11;
  Query Match
  Best Local Similarity
                          100.0%; Pred. No. 1.1e+05;
             2; Conservative
                                 0; Mismatches
                                                   0; Indels
                                                                               0;
  Matches
            2 KS 3
Qy
              \mathbf{H}
            1 KS 2
Db
RESULT 38
O9NFX0
                 PRELIMINARY;
                                    PRT;
                                            11 AA.
ID
     Q9NFX0
AC
     O9NFX0;
     01-OCT-2000 (TrEMBLrel. 15, Created)
     01-OCT-2000 (TrEMBLrel. 15, Last sequence update)
DT
     01-JUN-2001 (TrEMBLrel. 17, Last annotation update)
DT
     Mitochondrial aconitase (Fragment).
DE
     ACON OR MAC OR CG9244.
GN
OS
     Drosophila melanogaster (Fruit fly).
     Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;
OC
     Neoptera; Endopterygota; Diptera; Brachycera; Muscomorpha;
OC
OC
     Ephydroidea; Drosophilidae; Drosophila.
OX
     NCBI TaxID=7227;
RN
     [1]
RΡ
     SEQUENCE FROM N.A.
RC
     STRAIN=CANTON S;
RA
     Lind M.I.;
     "Charaterisation of two iron regulatory proteins and mitochondrial
RT
```

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aconitase in Drosophila melanogaster.";
RT
     Submitted (DEC-1999) to the EMBL/GenBank/DDBJ databases.
RL
DR
     EMBL; AJ252019; CAB93522.1; -.
     FlyBase; FBqn0010100; Acon.
DR
     NON TER
                  11
                         11
FT
     SEQUENCE
                       1204 MW;
                                  7C889CE4D4469734 CRC64;
                11 AA;
SO
                          18.2%; Score 2; DB 5; Length 11;
  Query Match
                          100.0%; Pred. No. 1.1e+05;
  Best Local Similarity
                                                                               0;
  Matches
             2; Conservative
                                0; Mismatches
                                                   0;
                                                       Indels
                                                                       Gaps
           10 LM 11
Qу
              \mathbf{H}
            5 LM 6
Db
RESULT 39
Q8MPQ3
                 PRELIMINARY;
                                    PRT;
                                            11 AA.
ID
     Q8MPQ3
AC
     Q8MPQ3;
     01-OCT-2002 (TrEMBLrel. 22, Created)
DT
DT
     01-OCT-2002 (TrEMBLrel. 22, Last sequence update)
DT
     01-MAR-2003 (TrEMBLrel. 23, Last annotation update)
     Hypothetical protein Y23H5A.8b.
DE
     Y23H5A.8.
GN
OS
     Caenorhabditis elegans.
OC
     Eukaryota; Metazoa; Nematoda; Chromadorea; Rhabditida; Rhabditoidea;
     Rhabditidae; Peloderinae; Caenorhabditis.
OC
OX
     NCBI TaxID=6239;
RN
RP
     SEQUENCE FROM N.A.
RC
     STRAIN=Bristol N2;
     MEDLINE=99069613; PubMed=9851916;
RX
RA
     Waterston R.;
     "Genome sequence of the nematode C. elegans: a platform for
RT
     investigating biology. The C. elegans Sequencing Consortium.";
RT
RL
     Science 282:2012-2018(1998).
RN
     [2]
RP
     SEQUENCE FROM N.A.
RC
     STRAIN=Bristol N2;
     Dempsey S., Le T.T.;
RA
     "The sequence of C. elegans cosmid Y23H5A.";
RT
     Submitted (JUL-1998) to the EMBL/GenBank/DDBJ databases.
RL
RN
     [3]
     SEQUENCE FROM N.A.
RP
     STRAIN=Bristol N2;
RC
     Waterston R.;
     Submitted (JUN-2002) to the EMBL/GenBank/DDBJ databases.
RL
     EMBL; AF077541; AAM54173.1; -.
DR
     WormPep; Y23H5A.8b; CE31097.
DR
KW
     Hypothetical protein.
               11 AA; 1319 MW;
                                   6920D63A21B77414 CRC64;
SO
     SEQUENCE
                          18.2%; Score 2; DB 5; Length 11;
  Query Match
  Best Local Similarity
                          100.0%; Pred. No. 1.1e+05;
                                                                               0;
             2; Conservative
                                 0; Mismatches
                                                    0; Indels
                                                                   0; Gaps
  Matches
```

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3 SR 4
Qу
              \mathbf{H}
            3 SR 4
Db
RESULT 40
P82698
                                   PRT;
                                            11 AA.
ID
     P82698
                 PRELIMINARY;
AC
     P82698;
     01-MAR-2001 (TrEMBLrel. 16, Created)
DT
     01-MAR-2001 (TrEMBLrel. 16, Last sequence update)
DT
     01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
DT
    Periviscerokinin-1 (LEM-PVK-1).
DΕ
     Leucophaea maderae (Madeira cockroach),
OS
    Nauphoeta cinerea (Cinereous cockroach) (Gray cockroach),
OS
OS
     Blaberus craniifer,
     Blaptica dubia, and
OS
     Gromphadorina portentosa (Cockroach).
OS
     Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;
OC
     Neoptera; Orthopteroidea; Dictyoptera; Blattaria; Blaberoidea;
OC
OC
     Blaberidae; Leucophaea.
     NCBI TaxID=6988, 6990, 6982, 132935, 36953;
OX
RN
     SEQUENCE, FUNCTION, AND MASS SPECTROSCOPY.
RP
     TISSUE=ABDOMINAL PERISYMPATHETIC ORGANS;
RC
    MEDLINE=20307624; PubMed=10849006;
RX
     Predel R., Kellner R., Baggerman G., Steinmetzer T., Schoofs L.;
RA
     "Identification of novel periviscerokinins from single neurohaemal
RT
     release sites in insects. MS/MS fragmentation complemented by Edman
RT
     degradation.";
RT
     Eur. J. Biochem. 267:3869-3873(2000).
RL
     -!- FUNCTION: MEDIATES VISCERAL MUSCLE CONTRACTILE ACTIVITY
CC
         (MYOTROPIC ACTIVITY).
CC
     -!- MASS SPECTROMETRY: MW=1090.6; METHOD=MALDI.
CC
     GO; GO:0007218; P:neuropeptide signaling pathway; IEA.
DR
     Neuropeptide; Amidation.
KW
FT
     MOD RES
                  11
                         11
                                   AMIDATION.
     SEQUENCE
                       1091 MW;
                                  2C2D80E2D7605728 CRC64;
SO
                11 AA;
                          18.2%; Score 2; DB 5; Length 11;
  Query Match
                          100.0%; Pred. No. 1.1e+05;
  Best Local Similarity
                                                                               0;
             2: Conservative
                                0; Mismatches
                                                    0; Indels
                                                                       Gaps
  Matches
            8 SS 9
Qy
              11
Db
            2 SS 3
RESULT 41
P82699
                                    PRT:
                                            11 AA.
     P82699
                 PRELIMINARY;
ΙD
AC
     P82699;
     01-MAR-2001 (TrEMBLrel. 16, Created)
DT
     01-MAR-2001 (TrEMBLrel. 16, Last sequence update)
DT
     01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
DT
     Periviscerokinin-2 (LEM-PVK-2).
DE
     Leucophaea maderae (Madeira cockroach),
OS
```

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Nauphoeta cinerea (Cinereous cockroach) (Gray cockroach),
OS
     Blaberus craniifer,
os
     Blaptica dubia, and
OS
     Gromphadorina portentosa (Cockroach).
os
     Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;
OC
     Neoptera; Orthopteroidea; Dictyoptera; Blattaria; Blaberoidea;
OC
     Blaberidae; Leucophaea.
OC
     NCBI TaxID=6988, 6990, 6982, 132935, 36953;
OX
RN
     SEQUENCE, FUNCTION, AND MASS SPECTROSCOPY.
RP
     TISSUE=ABDOMINAL PERISYMPATHETIC ORGANS;
RC
RX
     MEDLINE=20307624; PubMed=10849006;
     Predel R., Kellner R., Baggerman G., Steinmetzer T., Schoofs L.;
RA
     "Identification of novel periviscerokinins from single neurohaemal
RT
     release sites in insects. MS/MS fragmentation complemented by Edman
RT
     degradation.";
RT
     Eur. J. Biochem. 267:3869-3873(2000).
RL
     -!- FUNCTION: MEDIATES VISCERAL MUSCLE CONTRACTILE ACTIVITY
CC
         (MYOTROPIC ACTIVITY).
CC
     -!- MASS SPECTROMETRY: MW=1102.6; METHOD=MALDI.
CC
     GO; GO:0007218; P:neuropeptide signaling pathway; IEA.
DR
KW
     Neuropeptide; Amidation.
                                  AMIDATION.
FT
     MOD RES
                  11
                         11
                                  2F4D9FFD85B05728 CRC64;
     SEQUENCE
                11 AA;
                        1103 MW;
SO
                          18.2%; Score 2; DB 5; Length 11;
  Query Match
                          100.0%; Pred. No. 1.1e+05;
  Best Local Similarity
                                                                               0;
                                 0; Mismatches
                                                    0;
                                                        Indels
                                                                   0;
                                                                       Gaps
             2; Conservative
            8 SS 9
Qу
              11
            2 SS 3
Db
RESULT 42
P82700
                                    PRT;
                                            11 AA.
     P82700
                 PRELIMINARY;
ID
     P82700:
AC
     01-MAR-2001 (TrEMBLrel. 16, Created)
DT
     01-MAR-2001 (TrEMBLrel. 16, Last sequence update)
DT
     01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
DT
     Periviscerokinin-3 (LEM-PVK-3).
DE
     Leucophaea maderae (Madeira cockroach),
OS
     Nauphoeta cinerea (Cinereous cockroach) (Gray cockroach),
os
     Blaberus craniifer,
OS
     Blaptica dubia (Argentinian wood cockroach), and
OS
     Gromphadorina portentosa (Cockroach).
OS
     Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;
OC
     Neoptera; Orthopteroidea; Dictyoptera; Blattaria; Blaberoidea;
OC
     Blaberidae; Leucophaea.
OC
     NCBI_TaxID=6988, 6990, 6982, 132935, 36953;
OX
RN
     SEQUENCE, FUNCTION, AND MASS SPECTROSCOPY.
RP
     TISSUE=ABDOMINAL PERISYMPATHETIC ORGANS;
RC
     MEDLINE=20307624; PubMed=10849006;
RX
     Predel R., Kellner R., Baggerman G., Steinmetzer T., Schoofs L.;
RA
     "Identification of novel periviscerokinins from single neurohaemal
RT
```

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degradation.";
RT
     Eur. J. Biochem. 267:3869-3873(2000).
RL
     -!- FUNCTION: MEDIATES VISCERAL MUSCLE CONTRACTILE ACTIVITY
CC
         (MYOTROPIC ACTIVITY).
CC
     -!- MASS SPECTROMETRY: MW=1146.6; METHOD=MALDI.
CC
     GO; GO:0007218; P:neuropeptide signaling pathway; IEA.
DR
     Neuropeptide; Amidation.
KW
                  11
                                  AMIDATION.
FT
    MOD RES
                         11
     SEOUENCE
                11 AA; 1147 MW;
                                  2F4D9FF2D7605698 CRC64;
SQ
                          18.2%; Score 2; DB 5; Length 11;
  Query Match
                          100.0%; Pred. No. 1.1e+05;
  Best Local Similarity
            2; Conservative
                                0; Mismatches
                                                   0;
                                                      Indels
                                                                  0; Gaps
                                                                              0;
  Matches
Qу
            8 SS 9
              11
            2 SS 3
Db
RESULT 43
Q9XSP7
                                   PRT;
                                           11 AA.
                 PRELIMINARY;
     Q9XSP7
ΙD
     Q9XSP7;
AC
     01-NOV-1999 (TrEMBLrel. 12, Created)
     01-NOV-1999 (TrEMBLrel. 12, Last sequence update)
DT
     01-DEC-2001 (TrEMBLrel. 19, Last annotation update)
DT
     Platelet-derived growth factor A chain (Fragment).
DΕ
     PDGFA.
GN
     Pygathrix nemaeus (Dove langur).
OS
     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC
     Mammalia; Eutheria; Primates; Catarrhini; Cercopithecidae; Colobinae;
OC
OC
     Pygathrix.
     NCBI TaxID=54133;
OX
RN
     [1]
     SEQUENCE FROM N.A.
RP
     MEDLINE=20065871; PubMed=10598812;
RX
     Bonthron D.T., Smith S.L., Campbell R.;
RA
     "Complex patterns of intragenic polymorphism at the PDGFA locus.";
RT
     Hum. Genet. 105:452-459(1999).
RL
     EMBL; AJ243282; CAB45924.1; -.
DR
     NON TER
                   1
                          1
FT
                         11
     NON TER
                  11
FT
                11 AA; 1345 MW; 7FB881F101E1E044 CRC64;
     SEQUENCE
SQ
                          18.2%; Score 2; DB 6; Length 11;
  Query Match
                          100.0%; Pred. No. 1.1e+05;
  Best Local Similarity
  Matches
             2;
                Conservative
                               0; Mismatches
                                                    0; Indels
                                                                  0; Gaps
                                                                              0;
            3 SR 4
Qу
              11
            3 SR 4
Db
RESULT 44
Q9XSP2
     Q9XSP2
                 PRELIMINARY;
                                   PRT;
                                            11 AA.
```

release sites in insects. MS/MS fragmentation complemented by Edman

RT

```
AC
     01-NOV-1999 (TrEMBLrel. 12, Created)
DT
     01-NOV-1999 (TrEMBLrel. 12, Last sequence update)
DT
     01-DEC-2001 (TrEMBLrel. 19, Last annotation update)
DT
     Platelet-derived growth factor A chain (Fragment).
DE
     PDGFA.
GN
     Hylobates syndactylus (Siamang) (Symphalangus syndactylus).
OS
     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC
     Mammalia; Eutheria; Primates; Catarrhini; Hylobatidae; Hylobates.
OC
     NCBI TaxID=9590;
OX
RN
     [1]
RP
     SEQUENCE FROM N.A.
     MEDLINE=20065871; PubMed=10598812;
RX
     Bonthron D.T., Smith S.L., Campbell R.;
RA
     "Complex patterns of intragenic polymorphism at the PDGFA locus.";
RT
     Hum. Genet. 105:452-459(1999).
RL
DR
     EMBL; AJ243280; CAB45927.1; -.
FT
     NON TER
                   1
                          1
     NON TER
FT
                  11
                         11
                11 AA; 1345 MW;
                                  7FB881F101E1E044 CRC64;
SQ
     SEQUENCE
                          18.2%; Score 2; DB 6; Length 11;
  Query Match
                          100.0%; Pred. No. 1.1e+05;
  Best Local Similarity
                                 0; Mismatches
                                                   0; Indels
                                                                  0; Gaps
                                                                              0;
             2; Conservative
            3 SR 4
Qу
              3 SR 4
Db
RESULT 45
Q9TRX2
                                           11 AA.
                                   PRT;
     Q9TRX2
                 PRELIMINARY;
ID
AC
     09TRX2;
     01-MAY-2000 (TrEMBLrel. 13, Created)
DT
     01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
DT
     01-OCT-2003 (TrEMBLrel. 25, Last annotation update)
DT
     Glutamate dehydrogenase (EC 1.4.1.3) (Fragment).
DE
OS
     Bos taurus (Bovine).
     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC
     Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovoidea;
OC
     Bovidae; Bovinae; Bos.
OC
     NCBI TaxID=9913;
OX
RN
     [1]
RP
     SEQUENCE.
RX
     MEDLINE=91308094; PubMed=1854724;
RA
     Ozturk D.H., Colman R.F.;
     "Identification of cysteine-319 as the target amino acid of 8-[(4-
RT
     bromo-2,3-dioxobutyl)thio]adenosine 5'-triphosphate in bovine liver
     glutamate dehydrogenase.";
RT
     Biochemistry 30:7126-7134(1991).
RL
     GO; GO:0004353; F:glutamate dehydrogenase [NAD(P)] activity; IEA.
DR
                11 AA; 1207 MW; F46BF756A771B401 CRC64;
SQ
     SEQUENCE
                          18.2%; Score 2; DB 6; Length 11;
  Query Match
                          100.0%; Pred. No. 1.1e+05;
  Best Local Similarity
                                                                              0;
                               0; Mismatches
                                                    0; Indels
                                                                  0; Gaps
             2; Conservative
```

```
5 KG 6
Qу
Db
            9 KG 10
RESULT 46
Q9XSP5
                                            11 AA.
                 PRELIMINARY;
                                    PRT:
ID
     Q9XSP5
AC
     O9XSP5;
DT
     01-NOV-1999 (TrEMBLrel. 12, Created)
     01-NOV-1999 (TrEMBLrel. 12, Last sequence update)
DT
     01-DEC-2001 (TrEMBLrel. 19, Last annotation update)
DT
DΕ
     Platelet-derived growth factor A chain (Fragment).
GN
     PDGFA.
     Pan troglodytes (Chimpanzee).
OS
     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC
     Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Pan.
OC
OX
     NCBI_TaxID=9598;
RN
     [1]
     SEQUENCE FROM N.A.
RP
     MEDLINE=20065871; PubMed=10598812;
RX
     Bonthron D.T., Smith S.L., Campbell R.;
RA
     "Complex patterns of intragenic polymorphism at the PDGFA locus.";
RT
     Hum. Genet. 105:452-459(1999).
RL
     EMBL; AJ243277; CAB45926.1; -.
DR
     NON TER
FT
                   1
                           1
FT
     NON TER
                  11
                          11
                        1331 MW;
                                   7FB881F101E1F2D4 CRC64;
     SEQUENCE
                11 AA;
SQ
                                   Score 2; DB 6;
                                                    Length 11;
                           18.2%;
  Query Match
                                   Pred. No. 1.1e+05;
  Best Local Similarity
                           100.0%;
                                                                                0;
             2; Conservative
                                  0; Mismatches
                                                     0;
                                                         Indels
                                                                   0;
                                                                        Gaps
 Matches
            3 SR 4
Qy
              11
            3 SR 4
Db
RESULT 47
O9XSP8
                                             11 AA.
ID
     Q9XSP8
                 PRELIMINARY;
                                    PRT:
AC
     Q9XSP8;
     01-NOV-1999 (TrEMBLrel. 12, Created)
DT
     01-NOV-1999 (TrEMBLrel. 12, Last sequence update)
DT
     01-DEC-2001 (TrEMBLrel. 19, Last annotation update)
DT
     Platelet-derived growth factor A chain (Fragment).
DE
     PDGFA.
GN
OS
     Presbytis johnii.
     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC
     Mammalia; Eutheria; Primates; Catarrhini; Cercopithecidae; Colobinae;
OC
OC
     Presbytis.
     NCBI TaxID=98375;
OX
RN
     [1]
RP
     SEQUENCE FROM N.A.
     MEDLINE=20065871; PubMed=10598812;
RX
     Bonthron D.T., Smith S.L., Campbell R.;
RA.
```

```
"Complex patterns of intragenic polymorphism at the PDGFA locus.";
RT
     Hum. Genet. 105:452-459(1999).
RL
     EMBL; AJ243281; CAB46013.1; -.
DR
FT
     NON TER
                   1
                          1
     NON TER
                  11
                         11
FT
                        1345 MW;
                                   7FB881F101E1E044 CRC64;
     SEQUENCE
                11 AA;
SQ
                          18.2%;
                                  Score 2; DB 6; Length 11;
  Query Match
                          100.0%;
                                   Pred. No. 1.1e+05;
  Best Local Similarity
                                 0; Mismatches
                                                    0;
                                                        Indels
                                                                   0; Gaps
                                                                               0;
             2; Conservative
            3 SR 4
Qу
Db
            3 SR 4
RESULT 48
09XSP6
                                            11 AA.
     Q9XSP6
                 PRELIMINARY;
                                    PRT;
ID
AC
     Q9XSP6;
     01-NOV-1999 (TrEMBLrel. 12, Created)
DT
     01-NOV-1999 (TrEMBLrel. 12, Last sequence update)
DT
     01-DEC-2001 (TrEMBLrel. 19, Last annotation update)
DT
     Platelet-derived growth factor A chain (Fragment).
DE
     PDGFA.
GN
     Pongo pygmaeus (Orangutan).
OS
     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC
     Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Pongo.
OC
     NCBI TaxID=9600;
OX
RN
     [1]
RP
     SEQUENCE FROM N.A.
     MEDLINE=20065871; PubMed=10598812;
RX
     Bonthron D.T., Smith S.L., Campbell R.;
RA
     "Complex patterns of intragenic polymorphism at the PDGFA locus.";
RT
     Hum. Genet. 105:452-459(1999).
RL
     EMBL; AJ243279; CAB45925.1; -.
DR
                           1
     NON TER
                   1
FT
     NON TER
                          11
                  11
FT
                                   7FB881F101E1E044 CRC64;
                        1345 MW;
SQ
     SEQUENCE
                11 AA;
                                   Score 2; DB 6; Length 11;
                           18.2%;
  Query Match
                           100.0%; Pred. No. 1.1e+05;
  Best Local Similarity
                                                                                0;
                                                         Indels
                                                                   0;
                                                                       Gaps
                 Conservative
                                 0; Mismatches
                                                     0;
  Matches
             2;
             3 SR 4
Qy
               11
             3 SR 4
Db
RESULT 49
Q9XSQ4
                                    PRT;
                                             11 AA.
     Q9XSQ4
                  PRELIMINARY;
ID
AC
     Q9XSQ4;
     01-NOV-1999 (TrEMBLrel. 12, Created)
DT
     01-NOV-1999 (TrEMBLrel. 12, Last sequence update)
DT
     01-DEC-2001 (TrEMBLrel. 19, Last annotation update)
DT
     Platelet-derived growth factor A chain (Fragment).
DΕ
```

```
GN
     PDGFA.
     Gorilla gorilla (gorilla).
OS
     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC
    Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Gorilla.
OC
     NCBI TaxID=9593;
OX
RN
     [1]
     SEQUENCE FROM N.A.
RP
     MEDLINE=20065871; PubMed=10598812;
RX
     Bonthron D.T., Smith S.L., Campbell R.;
RA
     "Complex patterns of intragenic polymorphism at the PDGFA locus.";
RT
     Hum. Genet. 105:452-459(1999).
RL
     EMBL; AJ243278; CAB45916.1; -.
DR
     NON TER
                  1
                          1
FT
     NON TER
                         11
FT
                  11
                11 AA; 1331 MW; 7FB881F101E1F2D4 CRC64;
     SEQUENCE
SO
                          18.2%; Score 2; DB 6; Length 11;
  Query Match
                          100.0%; Pred. No. 1.1e+05;
  Best Local Similarity
            2; Conservative 0; Mismatches
                                                    0; Indels
                                                                  0; Gaps
                                                                               0;
  Matches
            3. SR 4
Qγ
              11
            3 SR 4
Db
RESULT 50
077900
                                            11 AA.
     077900
                 PRELIMINARY;
                                    PRT:
ΙD
     077900;
AC
     01-NOV-1998 (TrEMBLrel. 08, Created)
DT
     01-NOV-1998 (TrEMBLrel. 08, Last sequence update)
DT
     01-DEC-2001 (TrEMBLrel. 19, Last annotation update)
DT
     MHC class II B locus 14 (Fragment).
DΕ
     Oreochromis niloticus (Nile tilapia) (Tilapia nilotica).
OS
     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC
     Actinopterygii; Neopterygii; Teleostei; Euteleostei; Neoteleostei;
OC
     Acanthomorpha; Acanthopterygii; Percomorpha; Perciformes; Labroidei;
OC
     Cichlidae; Oreochromis.
OC
     NCBI TaxID=8128;
OX
RN
     [1]
     SEQUENCE FROM N.A.
RP
     MEDLINE=98315113; PubMed=9649539;
RX
     Malaga-Trillo E., Zaleska-Rutczynska Z., McAndrew B., Vincek V.,
RA
     Figueroa F., Sultmann H., Klein J.;
RA
     "Linkage relationships and haplotype polymorphism among cichlid mhc
RT
     class II B loci.";
RT
     Genetics 149:1527-1537(1998).
RL
     EMBL; AF050010; AAC41349.1; -.
DR
     NON TER
                   1
                           1
FT
                   11
                          11
\mathbf{FT}
     NON TER
                                   81C12D8EB7341B41 CRC64;
                11 AA; 1349 MW;
     SEOUENCE
SQ
                           18.2%; Score 2; DB 7; Length 11;
  Query Match
                           100.0%; Pred. No. 1.1e+05;
  Best Local Similarity
                                                                               0;
             2; Conservative 0; Mismatches
                                                    0; Indels
                                                                   0; Gaps
```

```
||
8 SR 9
```

Db

```
RESULT 51
077917
                                            11 AA.
                 PRELIMINARY;
                                    PRT:
    077917
ID
     077917;
AC
     01-NOV-1998 (TrEMBLrel. 08, Created)
DT
     01-NOV-1998 (TrEMBLrel. 08, Last sequence update)
DT
     01-DEC-2001 (TrEMBLrel. 19, Last annotation update)
DT
    MHC class II B locus 14 (Fragment).
DE
     Oreochromis niloticus (Nile tilapia) (Tilapia nilotica).
OS
     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC
     Actinopterygii; Neopterygii; Teleostei; Euteleostei; Neoteleostei;
OC
     Acanthomorpha; Acanthopterygii; Percomorpha; Perciformes; Labroidei;
OC
     Cichlidae; Oreochromis.
OC
     NCBI TaxID=8128;
OX
RN
     [1]
     SEQUENCE FROM N.A.
RP
     MEDLINE=98315113; PubMed=9649539;
RX
     Malaga-Trillo E., Zaleska-Rutczynska Z., McAndrew B., Vincek V.,
RA
     Figueroa F., Sultmann H., Klein J.;
RA
     "Linkage relationships and haplotype polymorphism among cichlid mhc
RT
     class II B loci.";
RT
     Genetics 149:1527-1537(1998).
RL
     EMBL; AF050030; AAC41369.1; -.
DR
FT
     NON TER
                   1
                          1
                  11
                          11
FT
     NON TER
                11 AA; 1349 MW;
                                   81C12D8EB7341B41 CRC64;
     SEQUENCE
SQ
                           18.2%; Score 2; DB 7; Length 11;
  Query Match
                          100.0%; Pred. No. 1.1e+05;
  Best Local Similarity
                                                                               0;
             2; Conservative
                                 0; Mismatches
                                                    0;
                                                       Indels
                                                                   0;
                                                                       Gaps
  Matches
            3 SR 4
Qу
              11
            8 SR 9
Db
RESULT 52
077902
                                            11 AA.
     077902
                  PRELIMINARY;
                                    PRT;
ΙD
     077902;
     01-NOV-1998 (TrEMBLrel. 08, Created)
DT
     01-NOV-1998 (TrEMBLrel. 08, Last sequence update)
_{
m DT}
     01-DEC-2001 (TrEMBLrel. 19, Last annotation update)
DT
     MHC class II B locus 14 (Fragment).
DΕ
     Oreochromis niloticus (Nile tilapia) (Tilapia nilotica).
OS
     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC
     Actinopterygii; Neopterygii; Teleostei; Euteleostei; Neoteleostei;
OC
     Acanthomorpha; Acanthopterygii; Percomorpha; Perciformes; Labroidei;
OC
     Cichlidae; Oreochromis.
OC
     NCBI TaxID=8128;
OX
RN
      [1]
RP
      SEQUENCE FROM N.A.
RX
     MEDLINE=98315113; PubMed=9649539;
```

```
Malaga-Trillo E., Zaleska-Rutczynska Z., McAndrew B., Vincek V.,
RA
     Figueroa F., Sultmann H., Klein J.;
RA
     "Linkage relationships and haplotype polymorphism among cichlid mhc
RT 
     class II B loci.";
RT
RL
     Genetics 149:1527-1537(1998).
     EMBL; AF050012; AAC41351.1; -.
DR
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FT
                   1
     NON TER
                         11
                  11
FT
                        1349 MW;
                                  81C12D8EB7341B41 CRC64;
     SEQUENCE
                11 AA;
SQ
                          18.2%; Score 2; DB 7; Length 11;
  Query Match
                                   Pred. No. 1.1e+05;
                          100.0%;
  Best Local Similarity
                                                    0;
                                                       Indels
                                                                  0;
                                                                      Gaps
                                                                               0;
  Matches
             2; Conservative
                                 0; Mismatches
            3 SR 4
Qy
              11
            8 SR 9
Db
RESULT 53
077921
                                    PRT;
                                            11 AA.
                 PRELIMINARY;
     077921
ID
AC
     077921;
     01-NOV-1998 (TrEMBLrel. 08, Created)
DT
     01-NOV-1998 (TrEMBLrel. 08, Last sequence update)
DТ
     01-DEC-2001 (TrEMBLrel. 19, Last annotation update)
DT
     MHC class II B locus 14 (Fragment).
DE
     Pseudotropheus sp. 'Pseudotropheus tropheops complex'.
OS
     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC
     Actinopterygii; Neopterygii; Teleostei; Euteleostei; Neoteleostei;
OC
     Acanthomorpha; Acanthopterygii; Percomorpha; Perciformes; Labroidei;
OC
OC
     Cichlidae; Pseudotropheus.
OX
     NCBI_TaxID=51796;
RN
     [1]
RP
     SEQUENCE FROM N.A.
     MEDLINE=98315113; PubMed=9649539;
RX
     Malaga-Trillo E., Zaleska-Rutczynska Z., McAndrew B., Vincek V.,
RA
     Figueroa F., Sultmann H., Klein J.;
RA .
     "Linkage relationships and haplotype polymorphism among cichlid mhc
RT
RT
     class II B loci.";
RL
     Genetics 149:1527-1537(1998).
DR
     EMBL; AF050034; AAC41373.1; -.
FT
     NON TER
                   1
                          1
                  11
                         11
FT
     NON TER
                                   81C12D8EB7341B41 CRC64;
                11 AA; 1349 MW;
     SEQUENCE
SQ
                           18.2%;
                                   Score 2; DB 7; Length 11;
  Query Match
                          100.0%; Pred. No. 1.1e+05;
  Best Local Similarity
                                                                               0;
                                                    0; Indels
                                                                   0;
                                                                       Gaps
                                  0; Mismatches
  Matches
             2; Conservative
            3 SR 4
QУ
              11
             8 SR 9
Db
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RESULT 54 Q9TQB3

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PRT;
                                            11 AA.
     оэтовз
                 PRELIMINARY;
ID
AC
     09TOB3;
     01-MAY-2000 (TrEMBLrel. 13, Created)
DT
     01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
DT
     01-DEC-2001 (TrEMBLrel. 19, Last annotation update)
DT
     MHC class I related protein 1 (Fragment).
DE
     MR1.
GN
OS.
     Homo sapiens (Human).
     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC
     Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OC
     NCBI TaxID=9606;
OX
RN
     [1]
RP
     SEQUENCE FROM N.A.
     MEDLINE=98451457; PubMed=9780177;
RX
     Riegert P., Wanner V., Bahram S.;
RA
     "Genomics, isoforms, expression, and phylogeny of the MHC class I-
RT
     related MR1 gene.";
RT
     J. Immunol. 161:4066-4077(1998).
RL
     EMBL; AF039526; AAD02172.1; -.
DR
     NON TER
                  11
                         11
FT
                                  5E71A31E29CDD697 CRC64;
     SEQUENCE
                11 AA; 1235 MW;
SO
                          18.2%; Score 2; DB 7;
                                                    Length 11;
  Query Match
                          100.0%; Pred. No. 1.1e+05;
  Best Local Similarity
             2; Conservative
                                                                  0;
                                                                       Gaps
                                                                               0;
                                0; Mismatches
                                                    0;
                                                        Indels
Matches
           10 LM 11
Qу
              II
            4 LM 5
Db
RESULT 55
077901
ID
     077901
                 PRELIMINARY;
                                 PRT;
                                            11 AA.
AC
     077901;
DΤ
     01-NOV-1998 (TrEMBLrel. 08, Created)
DT
     01-NOV-1998 (TrEMBLrel. 08, Last sequence update)
DT
     01-DEC-2001 (TrEMBLrel. 19, Last annotation update)
DΕ
     MHC class II B locus 14 (Fragment).
     Oreochromis niloticus (Nile tilapia) (Tilapia nilotica).
OS
     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC
     Actinopteryqii; Neopteryqii; Teleostei; Euteleostei; Neoteleostei;
OC
     Acanthomorpha; Acanthopterygii; Percomorpha; Perciformes; Labroidei;
OC
OC.
     Cichlidae; Oreochromis.
OX
     NCBI TaxID=8128;
RN
     [1]
RP
     SEQUENCE FROM N.A.
     MEDLINE=98315113; PubMed=9649539;
RX
     Malaga-Trillo E., Zaleska-Rutczynska Z., McAndrew B., Vincek V.,
RA
     Figueroa F., Sultmann H., Klein J.;
RA
     "Linkage relationships and haplotype polymorphism among cichlid mhc
RT
     class II B loci.";
RT
RL
     Genetics 149:1527-1537(1998).
DR
     EMBL; AF050011; AAC41350.1; -.
FT
     NON TER
                   1
                          1
FT
     NON TER
                  11
                          11
SQ
     SEQUENCE
                11 AA; 1349 MW; 81C12D8EB7341B41 CRC64;
```

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18.2%; Score 2; DB 7; Length 11;
 Query Match
                          100.0%; Pred. No. 1.1e+05;
  Best Local Similarity
                                                                              0;
                               0; Mismatches
                                                                  0;
                                                   0; Indels
                                                                      Gaps
            2; Conservative
            3 SR 4
Qу
              \mathbf{H}
            8 SR 9
Db
RESULT 56
077892
                 PRELIMINARY;
                                   PRT;
                                           11 AA.
     077892
ID
     077892;
AC
     01-NOV-1998 (TrEMBLrel. 08, Created)
DT
     01-NOV-1998 (TrEMBLrel. 08, Last sequence update)
DT
     01-DEC-2001 (TrEMBLrel. 19, Last annotation update)
DT
    MHC class II B locus 10 (Fragment).
DΕ
     Oreochromis niloticus (Nile tilapia) (Tilapia nilotica).
OS
     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC
     Actinopterygii; Neopterygii; Teleostei; Euteleostei; Neoteleostei;
OC
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OC
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OC
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     Malaga-Trillo E., Zaleska-Rutczynska Z., McAndrew B., Vincek V.,
RA
     Figueroa F., Sultmann H., Klein J.;
RA
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RT
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            9 SL 10
Qy
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Db
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DE
     Oreochromis niloticus (Nile tilapia) (Tilapia nilotica).
OS
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OC
OC
     Actinopterygii; Neopterygii; Teleostei; Euteleostei; Neoteleostei;
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           2; Conservative
 Matches
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Qу
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            8 SR 9
Db
RESULT 58
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     01-DEC-2001 (TrEMBLrel. 19, Last annotation update)
DT
DE
     MHC class II B locus 4 (Fragment).
OS
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Qу
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Db

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RESULT 59
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DT
     01-DEC-2001 (TrEMBLrel. 19, Last annotation update)
DT
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DE
     Oreochromis niloticus (Nile tilapia) (Tilapia nilotica).
OS
     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC
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OC
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OC
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RA -
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            3 SR 4
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Db
            8 SR 9
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ID
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     01-DEC-2001 (TrEMBLrel. 19, Last annotation update)
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DΕ
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OC
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OC
     Acanthomorpha; Acanthopterygii; Percomorpha; Perciformes; Labroidei;
OC
     Cichlidae; Oreochromis.
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SQ
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                                                                  0;
                                                                      Gaps
  Matches
             2; Conservative
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Qу
              11
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Db
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DT
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DT
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DT
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DE
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OS
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OC
     Actinopterygii; Neopterygii; Teleostei; Euteleostei; Neoteleostei;
OC
     Acanthomorpha; Acanthopterygii; Percomorpha; Perciformes; Labroidei;
OC
OC
     Cichlidae; Oreochromis.
OX
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QУ
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Db
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RESULT 62 077899

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     01-DEC-2001 (TrEMBLrel. 19, Last annotation update)
DE
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     Oreochromis niloticus (Nile tilapia) (Tilapia nilotica).
OS
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OC
     Actinopterygii; Neopterygii; Teleostei; Euteleostei; Neoteleostei;
OC
     Acanthomorpha; Acanthopterygii; Percomorpha; Perciformes; Labroidei;
OC
     Cichlidae; Oreochromis.
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  Matches
             2; Conservative
            3 SR 4
              11
Db
            8 SR 9
RESULT 63
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OC
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OC
OC
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             2; Conservative
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                                                  0; Indels
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Qу
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            9 SL 10
Db
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DE
     Oreochromis niloticus (Nile tilapia) (Tilapia nilotica).
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OC
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OC
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                                                                      Gaps
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Qу
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            9 SL 10
Db
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FT

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Oreochromis niloticus (Nile tilapia) (Tilapia nilotica).
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OC
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                                0; Mismatches
                                                       Indels
                                                                      Gaps
             2; Conservative
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Qу
              | |
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Db
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OC
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RA
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RT
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  Query Match
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                                  Score 2; DB 7; Length 11;
  Best Local Similarity
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             2; Conservative
                                 0; Mismatches
  Matches
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Qy
              \perp
Db
            8 SR 9
RESULT 67
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DT
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DE
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OS
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OC
     Actinopteryqii; Neopteryqii; Teleostei; Euteleostei; Neoteleostei;
OC
     Acanthomorpha; Acanthopterygii; Percomorpha; Perciformes; Labroidei;
OC
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OC
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RA
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RA
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RT
RT
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RL
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                        1349 MW;
                                  81C12D8EB7341B41 CRC64;
SO
                          18.2%; Score 2; DB 7; Length 11;
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                          100.0%; Pred. No. 1.1e+05;
  Best Local Similarity
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                                 0; Mismatches
                                                   0;
                                                        Indels
                                                                       Gaps
                                                                               0;
            3 SR 4
Qy
            8 SR 9
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     01-DEC-2001 (TrEMBLrel. 19, Last annotation update)
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DE
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OS
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OC
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OC
     Acanthomorpha; Acanthopterygii; Percomorpha; Perciformes; Labroidei;
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     Cichlidae; Oreochromis.
OX
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RA
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RT
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RT
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SQ
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                                 0; Mismatches
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                                                                  0; Gaps
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QУ
              11
Db
            9 SL 10
RESULT 69
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DT
     01-MAR-2001 (TrEMBLrel. 16, Last sequence update)
DT
     01-OCT-2003 (TrEMBLrel. 25, Last annotation update)
DT
     Cytochrome c oxidase subunit I (Fragment).
DE
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GN
os
     Agama agama (Red-headed rock agama).
OG
    Mitochondrion.
     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC
OC
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RX
    MEDLINE=22114082; PubMed=12118408;
     Macey J.R., Schulte J.A. II, Larson A.;
RA
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     "Evolution and information content of the mitochondrial genomic
RT
     structural features illustrated with acrodont lizards.";
     Syst. Biol. 49:257-277(2000).
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     Macey J.R., Schulte J.A. II, Larson A., Ananjeva N.B., Wang Y.,
     Pethiyagoda R., Rastegar-Pouyani N., Papenfuss T.J.;
RA
     "Evaluating Trans-Tethys migration: An example using Acrodont lizard
RT
     phylogenetics.";
RT
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     Syst. Biol. 49:233-256(2000).
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DΤ
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DT
     01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
DT
DE
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GN
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os
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OG
OC
     Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
     Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots; rosids;
OC
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OX
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RP
     Pfeil B.E., Brubaker C.L., Craven L.A., Crisp M.D.;
RA
     "Phylogeny of Hibiscus and the tribe Hibisceae (Malvaceae) using
RT
RT
     chloroplast DNA sequences of ndhF and the rpl16 intron.";
     Syst. Bot. 27:333-350(2002).
RL
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DT
     01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
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GN
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OS
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OG
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Query Match

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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
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    Macey J.R., Schulte J.A. II, Larson A.;
RA
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     structural features illustrated with acrodont lizards.";
RT
     Syst. Biol. 49:257-277(2000).
RL
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RA
     Pethiyagoda R., Rastegar-Pouyani N., Papenfuss T.J.;
RA
     "Evaluating Trans-Tethys migration: An example using Acrodont lizard
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     Syst. Biol. 49:233-256(2000).
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DT
     01-OCT-2002 (TrEMBLrel. 22, Last sequence update)
DT
     01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
DT
DE
     Ribosomal protein 16 (Fragment).
GN
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     Lagunaria patersonia.
OS
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OG
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OC
     Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots; rosids;
OC
     eurosids II; Malvales; Malvaceae; Malvoideae; Lagunaria.
OC
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RA
     Pfeil B.E., Brubaker C.L., Craven L.A., Crisp M.D.;
     "Phylogeny of Hibiscus and the tribe Hibisceae (Malvaceae) using
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     chloroplast DNA sequences of ndhF and the rpl16 intron.";
RT
     Syst. Bot. 27:333-350(2002).
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DT
     01-OCT-2002 (TrEMBLrel. 22, Last sequence update)
DΤ
     01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
DT
     Ribosomal protein 16 (Fragment).
DE
GN
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OS
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OG
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OC
     Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots; rosids;
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     "Phylogeny of Hibiscus and the tribe Hibisceae (Malvaceae) using
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     chloroplast DNA sequences of ndhF and the rpl16 intron.";
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DT
     01-MAR-2002 (TrEMBLrel. 20, Last sequence update)
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KW

Chloroplast.

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01-OCT-2003 (TrEMBLrel. 25, Last annotation update)
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DE
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OS
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OG
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OC
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OC
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RP
    Melville J., Schulte J.A. II, Larson A.;
RA
     "A molecular phylogenetic study of ecological diversification in the
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     Australian lizard genus Ctenophorus.";
RT
     Submitted (MAY-2001) to the EMBL/GenBank/DDBJ databases.
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OS
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     Macey J.R., Larson A., Ananjeva N.B., Papenfuss T.J.;
RA
     "Replication slippage may cause parallel evolution in the secondary
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RT
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     Mol. Biol. Evol. 14:30-39(1997).
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RA
     "Evolution and information content of the mitochondrial genomic
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structural features illustrated with acrodont lizards.";
RT
     Syst. Biol. 49:257-277(2000).
RL
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RA
     Pethiyagoda R., Rastegar-Pouyani N., Papenfuss T.J.;
RA
     "Evaluating Trans-Tethys migration: An example using Acrodont lizard
RT
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RT
    Syst. Biol. 49:233-256(2000).
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             \perp
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Db
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Search completed: April 8, 2004, 15:46:10 Job time: 28.7692 secs

## GenCore version 5.1.6 Copyright (c) 1993 - 2004 Compugen Ltd.

OM protein - protein search, using sw model

Run on: April 8, 2004, 15:30:07; Search time 5.15385 Seconds

(without alignments)

111.135 Million cell updates/sec

Title: US-09-787-443A-21

Perfect score: 11

Sequence: 1 AKSRKGNSSLM 11

Scoring table: OLIGO

Gapop 60.0 , Gapext 60.0

Searched: 141681 segs, 52070155 residues

Word size:

Total number of hits satisfying chosen parameters: 70

Minimum DB seq length: 11 Maximum DB seq length: 11

Post-processing: Listing first 100 summaries

Database: SwissProt 42:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

## SUMMARIES

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4	2	18.2	11	1	HS70 PINPS	P81672	pinus pinas	
5	2	18.2	11	. 1	NXSN PSETE	P59072	pseudonaja	
. 6	2	18.2	11	1	OAIF SARBU	P83518	sarcophaga	
7	2	18.2	11	1	RS30 ONCMY	P83328	oncorhynchu	
8	2	18.2	11	1	TKC2 CALVO	P41518	calliphora	
9	2	18.2	11	1	TKN1 PSEGU	P42986	pseudophryn	
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11	2	18.2	. 11	1	TKN1 UPERU	P08612	uperoleia r	
12	2	18.2	11	1	TKN2 PSEGU	P42987	pseudophryn	
13	2	18.2	11	1	TKN2 UPERU	P08616	uperoleia r	
14	2	18.2	11	1	TKN3 PSEGU	P42988	pseudophryn	
15	2	18.2	11	1	TKN4 PSEGU	P42989	pseudophryn	
16	2	18.2	11	1	TKN5 PSEGU	P42990	pseudophryn	
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19	2	18.2	11	1	TKNA_HORSE			equus cabal
20	2	18.2	11	1	TKNA_ONCMY	•		oncorhynchu
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29	1	9.1	11	1	ASL2 BACSE			bacteroides
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30	1				_			bothrops in
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35	1	9.1	11	1	CA22_LITCI			litoria cit
36	1	9.1	11	1	CA31_LITCI			litoria cit
37	1	9.1	11	1	CA32 LITCI		P82090	litoria cit
38	1	9.1	11	1	CA41 LITCI		P82091	litoria cit
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42	1	9.1	11	1	CSI5 BACSU		P81095	bacillus su
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44	1	9.1	11	1	CX5B CONAL			conus aulic
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			11	1	EFG CLOPA			clostridium
46	1	9.1			_			rattus norv
47	1	9.1	11	1	ES1_RAT			penaeus mon
48	1	9.1	11	1	FAR6_PENMO			
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50	1	9.1	11	1	LADD_ONCMY			oncorhynchu
51	1	9.1	11	1	LPW_THETH			thermus the
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67	1	9.1	11	1	TIN4_HOPTI			hoplobatrac
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.70	1	9.1	11	1	ULAG_HUMAN		F3T933	homo sapien

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     01-NOV-1995 (Rel. 32, Created)
DT
     01-NOV-1995 (Rel. 32, Last sequence update)
DT
     16-OCT-2001 (Rel. 40, Last annotation update)
DT
     Quinoline 2-oxidoreductase, alpha chain (EC 1.3.99.17) (Fragment).
DΕ
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os
     Bacteria; Proteobacteria; Betaproteobacteria; Burkholderiales;
OC
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OC
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OX
RN
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RP
     STRAIN=63;
RC
     MEDLINE=96035889; PubMed=7556204;
RX
     Schach S., Tshisuaka B., Fetzner S., Lingens F.;
RA
     "Quinoline 2-oxidoreductase and 2-oxo-1,2-dihydroquinoline 5,6-
RT
     dioxygenase from Comamonas testosteroni 63. The first two enzymes in
RT
     quinoline and 3-methylquinoline degradation.";
RT
     Eur. J. Biochem. 232:536-544(1995).
RL
     -!- FUNCTION: Converts (3-methyl-)-quinoline to (3-methyl-)2-oxo-
CC
         1,2-dihydroquinoline.
CC
     -!- CATALYTIC ACTIVITY: Quinoline + acceptor + H(2)O = isoquinolin-
CC
         1(2H)-one + reduced acceptor.
CC
     -!- COFACTOR: FAD, molybdenum and iron-sulfur.
CC
     -!- PATHWAY: Degradation of quinoline and (3-methyl-)quinoline; first
CC
CC
         step.
     -!- SUBUNIT: Heterohexamer of two alpha chains, two beta chains, and
CC
         two gamma chains (Probable).
CC.
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DT
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DE
DE
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     Megascolia flavifrons (Garden dagger wasp) (Solitary wasp).
os
     Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;
OC
     Neoptera; Endopterygota; Hymenoptera; Apocrita; Aculeata; Vespoidea;
OC
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Scoliidae; Megascolia.
    NCBI TaxID=7437;
OX
RN
     [1]
RP
     SEQUENCE.
     TISSUE=Venom;
RC
    MEDLINE=87293024; PubMed=3617088;
RX
     Yasuhara T., Mantel P., Nakajima T., Piek T.;
RA
     "Two kinins isolated from an extract of the venom reservoirs of the
RT
     solitary wasp Megascolia flavifrons.";
RT
     Toxicon 25:527-535(1987).
RL
RN
     [2]
RΡ
     SEQUENCE.
     TISSUE=Venom;
RC
     Nakajima T., Piek T., Yashuara T., Mantel P.;
RA
     "Two kinins isolated from the venom of Megascolia flavifrons.";
RT
     Toxicon 26:34-34(1988).
RL
     -!- FUNCTION: Both proteins have bradykinin-like, although lower
CC
         activities (e.g. smooth muscle contraction).
CC
     -!- SUBCELLULAR LOCATION: Secreted; wasp venom reservoirs.
CC
     -!- SIMILARITY: Belongs to the bradykinin family.
CC
     PIR; B26744; B26744.
DR
     GO; GO:0005615; C:extracellular space; IDA.
DR
     GO; GO:0045776; P:negative regulation of blood pressure; ISS.
DR
     GO; GO:0045987; P:positive regulation of smooth muscle contra. . .; TAS.
DR
     Bradykinin; Vasodilator.
KW
                                  MEGASCOLIAKININ.
     PEPTIDE
                         11
FT
                   1
                                   BRADYKININ-LIKE PEPTIDE.
FT
     PEPTIDE
                   1
                          9
                11 AA; 1273 MW;
                                   33867393D771A9C8 CRC64;
SO
     SEQUENCE
                          18.2%; Score 2; DB 1; Length 11;
  Query Match
                          100.0%; Pred. No. 1.1e+04;
  Best Local Similarity
                                 0; Mismatches
                                                    0; Indels
                                                                               0;
  Matches
             2; Conservative
                                                                   0:
                                                                       Gaps
            4 RK 5
Qy
              11
Db
            9 RK 10
RESULT 3
CORZ PERAM
     CORZ PERAM
                    STANDARD;
                                    PRT;
                                            11 AA.
     P11496;
AC
DT
     01-OCT-1989 (Rel. 12, Created)
     01-FEB-1994 (Rel. 28, Last sequence update)
     10-OCT-2003 (Rel. 42, Last annotation update)
     Corazonin.
DΕ
     Periplaneta americana (American cockroach).
OS
     Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;
OC
     Neoptera; Orthopteroidea; Dictyoptera; Blattaria; Blattoidea;
OC
     Blattidae; Periplaneta.
OC
     NCBI TaxID=6978;
OX
RN
     [1]
RP
     SEOUENCE.
RC
     TISSUE=Corpora cardiaca;
     MEDLINE=89325572; PubMed=2753132;
RX
     Veenstra J.A.;
RA
     "Isolation and structure of corazonin, a cardioactive peptide from
RT
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OC

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the American cockroach.";
RT
     FEBS Lett. 250:231-234(1989).
RL
     -!- FUNCTION: Cardioactive peptide. Corazonin is probably involved
CC
         in the physiological regulation of the heart beat.
CC
     -!- SUBCELLULAR LOCATION: Secreted.
CC
     PIR; S05002; S05002.
DR
     Neuropeptide; Amidation; Pyrrolidone carboxylic acid.
KW
                                   PYRROLIDONE CARBOXYLIC ACID.
FT
     MOD RES
                   1
                          1
     MOD RES
                  11
                         11
                                   AMIDATION.
FT
                11 AA;
     SEQUENCE
                        1387 MW;
                                  C7CFF32D6415AB46 CRC64;
SO
                                   Score 2; DB 1; Length 11;
  Query Match
                          18.2%;
                          100.0%; Pred. No. 1.1e+04;
  Best Local Similarity
                                                                       Gaps
                                                                               0;
             2; Conservative
                                0; Mismatches
                                                    0; Indels
  Matches
            3 SR 4
Qу
              \Box
            6 SR 7
Db
RESULT 4
HS70 PINPS
                                    PRT;
                                            11 AA.
     HS70 PINPS
                    STANDARD;
ID
     P81672;
AC
     15-JUL-1999 (Rel. 38, Created)
DT
     15-JUL-1999 (Rel. 38, Last sequence update)
DT
     15-MAR-2004 (Rel. 43, Last annotation update)
DT
     Heat shock 70 kDa protein (Fragment).
DΕ
     Pinus pinaster (Maritime pine).
OS
     Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
OC
     Spermatophyta; Coniferopsida; Coniferales; Pinaceae; Pinus.
OC
OX
     NCBI_TaxID=71647;
RN
     [1]
RP
     SEQUENCE.
RC
     TISSUE=Needle;
RX
     MEDLINE=99274088; PubMed=10344291;
     Costa P., Pionneau C., Bauw G., Dubos C., Bahrman N., Kremer A.,
RA
RA
     Frigerio J.-M., Plomion C.;
     "Separation and characterization of needle and xylem maritime pine
RT
RT
     proteins.";
     Electrophoresis 20:1098-1108(1999).
RL
     -!- MISCELLANEOUS: On the 2D-gel the determined pI of this protein
CC
         (spot N164) is: 5.4, its MW is: 73 kDa.
CC
     -!- SIMILARITY: Belongs to the heat shock protein 70 family.
CC
KW
     ATP-binding; Heat shock; Multigene family.
FT
     NON TER
                   1
                           1
     NON TER
FT
                  11
                          11
                11 AA; 1228 MW; 037C1BE8DAA44DD0 CRC64;
     SEQUENCE
SQ
  Query Match
                           18.2%; Score 2; DB 1; Length 11;
                           100.0%; Pred. No. 1.1e+04;
  Best Local Similarity
                                  0; Mismatches
                                                                   0; Gaps
                                                                                0;
                                                     0;
                                                        Indels
             2; Conservative
  Matches
             6 GN 7
Qу
               \mathbf{I}
Db
             9 GN 10
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RESULT 5
NXSN PSETE
                                    PRT;
                                            11 AA.
    NXSN PSETE
                    STANDARD;
ID
AC
     P59072;
DT
     28-FEB-2003 (Rel. 41, Created)
     28-FEB-2003 (Rel. 41, Last sequence update)
DT
     28-FEB-2003 (Rel. 41, Last annotation update)
DT
     Short neurotoxin N1 (Alpha neurotoxin) (Fragment).
DΕ
     Pseudonaja textilis (Eastern brown snake).
OS
     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC
     Lepidosauria; Squamata; Scleroglossa; Serpentes; Colubroidea;
OC
     Elapidae; Acanthophiinae; Pseudonaja.
OC
     NCBI TaxID=8673;
OX
RN
     [1]
     SEQUENCE, AND MASS SPECTROMETRY.
RP
RC
     TISSUE=Venom;
     MEDLINE=99449602; PubMed=10518793;
RX
     Gong N.L., Armugam A., Jeyaseelan K.;
RA
     "Postsynaptic short-chain neurotoxins from Pseudonaja textilis: cDNA
RT
     cloning, expression and protein characterization.";
RT
     Eur. J. Biochem. 265:982-989(1999).
RL
     -!- FUNCTION: Lethal neurotoxin, binds and inhibits nicotinic
CC
         acetylcholine receptors (nAChR).
CC
     -!- SUBCELLULAR LOCATION: Secreted.
CC
     -!- TISSUE SPECIFICITY: Expressed by the venom gland.
CC
     -!- MASS SPECTROMETRY: MW=6236; METHOD=Electrospray.
CC
     -!- MISCELLANEOUS: LD(50) is 0.84 mg/kg by intravenous injection.
CC
     -!- SIMILARITY: Belongs to the snake toxin family.
CC
     InterPro; IPR003571; Snake toxin.
DR
     PROSITE; PS00272; SNAKE TOXIN; PARTIAL.
DR
     Toxin; Neurotoxin; Postsynaptic neurotoxin;
KW
     Acetylcholine receptor inhibitor; Multigene family.
KW
FT
     UNSURE
                   3
                          3
FT
     NON TER
                  11
                         11
SQ
     SEQUENCE
                11 AA; 1319 MW;
                                  OD1EF0C81B58732B CRC64;
  Query Match
                          18.2%; Score 2; DB 1; Length 11;
                          100.0%; Pred. No. 1.1e+04;
  Best Local Similarity
                                0; Mismatches
                                                   0; Indels
                                                                       Gaps
  Matches
             2; Conservative
Qу
            5 KG 6
              II
Db
            5 KG 6
RESULT 6
OAIF SARBU
ΙD
     OAIF SARBU
                    STANDARD;
                                    PRT;
                                            11 AA.
AC
     P83518;
DT
     10-OCT-2003 (Rel. 42, Created)
     10-OCT-2003 (Rel. 42, Last sequence update)
DT
     10-OCT-2003 (Rel. 42, Last annotation update)
     Ovary-derived ACE interactive factor (Neb-ODAIF) [Contains: Neb-
DE
DE
     ODAIF(1-9); Neb-ODAIF(1-7)].
     Sarcophaga bullata (Grey flesh fly) (Neobellieria bullata).
OS
ОC
     Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;
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Neoptera; Endopterygota; Diptera; Brachycera; Muscomorpha; Oestroidea;
OC
     Sarcophagidae; Sarcophaga.
OC
     NCBI_TaxID=7385;
OX
RN
     SEOUENCE, SYNTHESIS, CHARACTERIZATION, AND MASS SPECTROMETRY.
RΡ
RC
     TISSUE=Ovary;
    MEDLINE=22272747; PubMed=12383874;
RX
     Vandingenen A., Hens K., Baggerman G., Macours N., Schoofs L.,
RA
     De Loof A., Huybrechts R.;
RA
     "Isolation and characterization of an angiotensin converting enzyme
RT
     substrate from vitellogenic ovaries of Neobellieria bullata.";
RT
     Peptides 23:1853-1863(2002).
RL
     -!- FUNCTION: Substrate for angiotensin converting enzyme (ACE) in
CC
CC
         vitro.
     -!- PTM: ACE hydrolyzes Neb-ODAIF by sequentially cleaving off two C-
CC
CC
         terminal dipeptides.
     -!- MASS SPECTROMETRY: MW=1312.7; METHOD=MALDI; RANGE=1-11.
CC
     -!- SIMILARITY: To the N-terminal part of insect vitellogenins.
CC
                         11
                                  NEB-ODAIF.
FT
     PEPTIDE
                   1
     PEPTIDE
                   1
                          9
                                  NEB-ODAIF(1-9).
FT
                          7
                                  NEB-ODAIF (1-7).
     PEPTIDE
                   1
FT
                11 AA; 1314 MW; 4E114BB566C5A763 CRC64;
     SEQUENCE
SQ
                          18.2%; Score 2; DB 1; Length 11;
  Query Match
                          100.0%; Pred. No. 1.1e+04;
  Best Local Similarity
                               0; Mismatches
                                                   0; Indels
                                                                  0; Gaps
                                                                              0;
            2; Conservative
  Matches
            9 SL 10
Qу
              \perp
Db
           10 SL 11
RESULT 7
RS30 ONCMY
     RS30 ONCMY
                    STANDARD;
                                   PRT;
                                           11 AA.
ID
     P83328;
AC
DT
     28-FEB-2003 (Rel. 41, Created)
DT
     28-FEB-2003 (Rel. 41, Last sequence update)
     10-OCT-2003 (Rel. 42, Last annotation update)
DT
     40S ribosomal protein S30 (Fragment).
DE
GN
os
     Oncorhynchus mykiss (Rainbow trout) (Salmo gairdneri).
     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC
     Actinopterygii; Neopterygii; Teleostei; Euteleostei;
OC
     Protacanthopterygii; Salmoniformes; Salmonidae; Oncorhynchus.
OC
OX
     NCBI TaxID=8022;
RN
     SEQUENCE, FUNCTION, AND MASS SPECTROMETRY.
RP
     TISSUE=Skin mucus;
RC
RX
     MEDLINE=22142142; PubMed=12147245;
     Fernandes J.M.O., Smith V.J.;
RA
     "A novel antimicrobial function for a ribosomal peptide from rainbow
RT
     trout skin.";
RT
     Biochem. Biophys. Res. Commun. 296:167-171(2002).
RL
CC
     -!- FUNCTION: Has antibacterial activity against Gram-positive
CC
CC
     -!- MASS SPECTROMETRY: MW=6676.6; METHOD=MALDI.
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-!- SIMILARITY: Belongs to the S30E family of ribosomal proteins.
CC
     Ribosomal protein; Antibiotic.
KW
                         11
FT
     NON TER
                  11
               11 AA; 1123 MW; 2312AB630DD735B8 CRC64;
     SEQUENCE
SO
                          18.2%; Score 2; DB 1; Length 11;
  Query Match
                          100.0%; Pred. No. 1.1e+04;
  Best Local Similarity
                                                                              0;
                                                 0; Indels
                                                                  0; Gaps
                              0; Mismatches
 Matches
            2; Conservative
            9 SL 10
Qy
              5 SL 6
Db
RESULT 8
TKC2 CALVO
                                   PRT;
                                           11 AA.
                    STANDARD;
     TKC2 CALVO
ID
     P41518;
AC
     01-NOV-1995 (Rel. 32, Created)
DT
     01-NOV-1995 (Rel. 32, Last sequence update)
DT
     10-OCT-2003 (Rel. 42, Last annotation update)
DT
     Callitachykinin II.
DE
     Calliphora vomitoria (Blue blowfly).
OS
     Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;
OC
     Neoptera; Endopterygota; Diptera; Brachycera; Muscomorpha; Oestroidea;
OC
     Calliphoridae; Calliphora.
OC
OX
     NCBI TaxID=27454;
RN
     [1]
     SEQUENCE, AND SYNTHESIS.
RP
     MEDLINE=95075727; PubMed=7984492;
RX
     Lundquist C.T., Clottens F.L., Holman G.M., Nichols R., Nachman R.J.,
RA
RA
     Naessel D.R.;
     "Callitachykinin I and II, two novel myotropic peptides isolated from
RT
     the blowfly, Calliphora vomitoria, that have resemblances to
RT
     tachykinins.";
RT
     Peptides 15:761-768(1994).
RL
     -!- FUNCTION: Myoactive peptide.
CC
     -!- SUBCELLULAR LOCATION: Secreted.
CC
     -!- SIMILARITY: SOME SIMILARITY TO TACHYKININS.
CC
     Tachykinin; Neuropeptide; Amidation.
KW
                                  AMIDATION.
FT
     MOD RES
                  11
                        11
                11 AA;
                       1103 MW;
                                  15D7E3F9C9CDD444 CRC64;
     SEQUENCE
SQ
                        18.2%; Score 2; DB 1; Length 11;
  Query Match
  Best Local Similarity 100.0%; Pred. No. 1.1e+04;
                                                                              0;
             2; Conservative
                                0; Mismatches
                                                    0;
                                                       Indels
                                                                  0; Gaps
  Matches
            6 GN 7
Qу
              11
            3 GN 4
Db
RESULT 9
TKN1 PSEGU
                                   PRT;
                                            11 AA.
     TKN1 PSEGU
                    STANDARD;
ΙD
АC
     P42986;
ĎΤ
     01-NOV-1995 (Rel. 32, Created)
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01-NOV-1995 (Rel. 32, Last sequence update)
DT
     10-OCT-2003 (Rel. 42, Last annotation update)
DT
DΕ
     Kassinin-like peptide K-I (PG-KI).
os
     Pseudophryne quentheri (Guenther's toadlet).
     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC
     Amphibia; Batrachia; Anura; Neobatrachia; Hyloidea; Myobatrachidae;
OC
     Myobatrachinae; Pseudophryne.
OC
     NCBI TaxID=30349;
OX
RN
     [1]
RP
     SEQUENCE.
     TISSUE=Skin secretion;
RC
     MEDLINE=90287814; PubMed=2356157;
RX
     Simmaco M., Severini C., de Biase D., Barra D., Bossa F.,
RA
     Roberts J.D., Melchiorri P., Erspamer V.;
RA
     "Six novel tachykinin- and bombesin-related peptides from the skin of
RT
     the Australian frog Pseudophryne guntheri.";
RT
     Peptides 11:299-304(1990).
RL
     -!- FUNCTION: Tachykinins are active peptides which excite neurons,
CC
         evoke behavioral responses, are potent vasodilators and
CC
         secretagogues, and contract (directly or indirectly) many smooth
CC
CC
         muscles.
     -!- SUBCELLULAR LOCATION: Secreted.
CC
     -!- TISSUE SPECIFICITY: Skin.
CC
     -!- SIMILARITY: Belongs to the tachykinin family.
CC
     PIR; B60409; B60409.
DR
     InterPro; IPR002040; Tachy Neurokinin.
DR
     InterPro; IPR008215; Tachykinin.
DR
     Pfam; PF02202; Tachykinin; 1.
DR
     SMART; SM00203; TK; 1.
DR
     PROSITE; PS00267; TACHYKININ; 1.
DR
     Amphibian defense peptide; Tachykinin; Neuropeptide; Amidation;
KW
     Pyrrolidone carboxylic acid.
KW
                                   PYRROLIDONE CARBOXYLIC ACID.
FT
     MOD RES
                   1
                          1
                         11
                                   AMIDATION.
FT
     MOD RES
                  11
                                  3DBA7C37C9CB1AB7 CRC64;
                        1269 MW;
     SEQUENCE
                11 AA;
SQ
                                  Score 2; DB 1;
                                                    Length 11;
                          18.2%;
  Query Match
                          100.0%; Pred. No. 1.1e+04;
  Best Local Similarity
                                  0; Mismatches
                                                    0;
                                                        Indels
                                                                      Gaps
                                                                               0;
  Matches
             2; Conservative
           10 LM 11
Qу
              10 LM 11
Db
RESULT 10
TKN1 UPEIN
                                            11 AA.
     TKN1 UPEIN
                    STANDARD;
                                    PRT;
ID
     P82026;
AC
     30-MAY-2000 (Rel. 39, Created)
DT
     30-MAY-2000 (Rel. 39, Last sequence update)
DT
     10-OCT-2003 (Rel. 42, Last annotation update)
DE
     Uperin 1.1.
     Uperoleia inundata (Floodplain toadlet).
OS
     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC
     Amphibia; Batrachia; Anura; Neobatrachia; Hyloidea; Myobatrachidae;
OC
     Myobatrachinae; Uperoleia.
OC
```

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NCBI TaxID=104953;
OX
RN
     SEQUENCE, AND MASS SPECTROMETRY.
RP
     TISSUE=Skin secretion;
RC
     Bradford A.M., Raftery M.J., Bowie J.H., Tyler M.J., Wallace J.C.,
RA
     Adams G.W., Severini C.;
RA
     "Novel uperin peptides from the dorsal glands of the australian
RT
     floodplain toadlet Uperoleia inundata.";
RT
     Aust. J. Chem. 49:475-484(1996).
RL
     -!- FUNCTION: Tachykinins are active peptides which excite neurons,
CC
         evoke behavioral responses, are potent vasodilators and
CC
         secretagogues, and contract (directly or indirectly) many smooth
CC
CC
         muscles.
     -!- SUBCELLULAR LOCATION: Secreted.
CC
     -!- TISSUE SPECIFICITY: Skin dorsal glands.
CC
     -!- MASS SPECTROMETRY: MW=1208; METHOD=FAB.
CC
     -!- SIMILARITY: Belongs to the tachykinin family.
CC
     InterPro; IPR002040; Tachy Neurokinin.
     Pfam; PF02202; Tachykinin; 1.
DR
     PROSITE; PS00267; TACHYKININ; 1.
DR
     Amphibian defense peptide; Tachykinin; Neuropeptide; Amidation;
KW
     Pyrrolidone carboxylic acid.
KW
                                   PYRROLIDONE CARBOXYLIC ACID.
                   1
                          1
FT
     MOD_RES
     MOD RES
                         11
                                   AMIDATION.
FT
                  11
                                  3293693E59CDD457 CRC64;
                11 AA; 1226 MW;
     SEQUENCE
SQ
                           18.2%; Score 2; DB 1; Length 11;
  Ouery Match
                          100.0%; Pred. No. 1.1e+04;
  Best Local Similarity
                                                                   0; Gaps
                                                                               0;
             2; Conservative
                                  0; Mismatches
                                                    0; Indels
  Matches
           10 LM 11
Qу
              1 4
           10 LM 11
Db
RESULT 11
TKN1 UPERU
     TKN1 UPERU
                    STANDARD;
                                    PRT;
                                            11 AA.
ID
     P08612;
AC
     01-AUG-1988 (Rel. 08, Created)
DT
     01-FEB-1994 (Rel. 28, Last sequence update)
DT
     10-OCT-2003 (Rel. 42, Last annotation update)
DT
DE
     Uperolein.
     Uperoleia rugosa (Wrinkled toadlet).
OS
     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC
     Amphibia; Batrachia; Anura; Neobatrachia; Hyloidea; Myobatrachidae;
OC
     Myobatrachinae; Uperoleia.
OC
OX
     NCBI TaxID=8368;
RN
     [1]
RP
     SEQUENCE.
RC
     TISSUE=Skin secretion;
     MEDLINE=75131227; PubMed=1120493;
RX
     Anastasi A., Erspamer V., Endean R.;
RA
     "Structure of uperolein, a physalaemin-like endecapeptide occurring
RT
     in the skin of Uperoleia rugosa and Uperoleia marmorata.";
RT
     Experientia 31:394-395(1975).
RL
     -!- FUNCTION: Tachykinins are active peptides which excite neurons,
CC
```

```
evoke behavioral responses, are potent vasodilators and
CC
         secretagogues, and contract (directly or indirectly) many smooth
CC
         muscles.
CC
     -!- SUBCELLULAR LOCATION: Secreted.
CC
CC
     -!- TISSUE SPECIFICITY: Skin.
     -!- SIMILARITY: Belongs to the tachykinin family.
CC
     InterPro; IPR002040; Tachy Neurokinin.
DR
     InterPro; IPR008215; Tachykinin.
DR
     Pfam; PF02202; Tachykinin; 1.
DR
     SMART; SM00203; TK; 1.
DR
     PROSITE; PS00267; TACHYKININ; 1.
     Amphibian defense peptide; Tachykinin; Neuropeptide; Amidation;
ΚW
     Pyrrolidone carboxylic acid.
ΚW
                                   PYRROLIDONE CARBOXYLIC ACID.
                          1
     MOD RES
                   1
FT
     MOD RES
                                   AMIDATION.
FT
                  11
                         11
                                  32867C3E59CDD457 CRC64;
     SEQUENCE
                11 AA;
                        1252 MW;
SQ
                          18.2%; Score 2; DB 1; Length 11;
  Query Match
                          100.0%; Pred. No. 1.1e+04;
  Best Local Similarity
                                                                               0;
                                                                       Gaps
                                                       Indels
                                                                   0;
             2; Conservative
                                  0; Mismatches
                                                    0;
           10 LM 11
Qу
           10 LM 11
RESULT 12
TKN2 PSEGU
                    STANDARD;
                                    PRT;
                                            11 AA.
     TKN2 PSEGU
     P42987;
AC
     01-NOV-1995 (Rel. 32, Created)
DT
     01-NOV-1995 (Rel. 32, Last sequence update)
DT
     10-OCT-2003 (Rel. 42, Last annotation update)
DT
     Kassinin-like peptide K-II (PG-KII).
DE
     Pseudophryne guentheri (Guenther's toadlet).
OS
     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC
     Amphibia; Batrachia; Anura; Neobatrachia; Hyloidea; Myobatrachidae;
     Myobatrachinae; Pseudophryne.
OC
     NCBI TaxID=30349;
OX
RN
     [1]
RP
     SEQUENCE.
RC
     TISSUE=Skin secretion;
     MEDLINE=90287814; PubMed=2356157;
RX
     Simmaco M., Severini C., de Biase D., Barra D., Bossa F.,
RA
     Roberts J.D., Melchiorri P., Erspamer V.;
RA
     "Six novel tachykinin- and bombesin-related peptides from the skin of
RT
     the Australian frog Pseudophryne guntheri.";
RT
     Peptides 11:299-304(1990).
RL
CC
     -!- FUNCTION: Tachykinins are active peptides which excite neurons,
CC
         evoke behavioral responses, are potent vasodilators and
         secretagogues, and contract (directly or indirectly) many smooth
CC
         muscles.
CC
CC
     -!- SUBCELLULAR LOCATION: Secreted.
     -!- TISSUE SPECIFICITY: Skin.
CC
CC
     -!- SIMILARITY: Belongs to the tachykinin family.
DR
     PIR; C60409; C60409.
DR
     InterPro; IPR002040; Tachy_Neurokinin.
```

```
InterPro; IPR008215; Tachykinin.
DR
     Pfam; PF02202; Tachykinin; 1.
DR
DR
     SMART; SM00203; TK; 1.
     PROSITE; PS00267; TACHYKININ; 1.
DR
     Amphibian defense peptide; Tachykinin; Neuropeptide; Amidation;
ΚW
     Pyrrolidone carboxylic acid.
KW
                                  PYRROLIDONE CARBOXYLIC ACID.
FT
     MOD RES
                   1
                          1
                  11
                         11
                                  AMIDATION.
FT
     MOD RES
                                  3A247C37C9CB1AB7 CRC64;
                11 AA;
                        1246 MW;
     SEQUENCE
SQ
 Query Match
                          18.2%; Score 2; DB 1; Length 11;
                          100.0%; Pred. No. 1.1e+04;
  Best Local Similarity
                                                    0; Indels
                                                                      Gaps
                                                                               0;
                                0; Mismatches
             2; Conservative
 Matches
           10 LM 11
Qy
              11
           10 LM 11
Db
RESULT 13
TKN2 UPERU
                                            11 AA.
                                   PRT:
     TKN2 UPERU
                    STANDARD;
ID
     P08616;
AC
     01-AUG-1988 (Rel. 08, Created)
DТ
     01-FEB-1994 (Rel. 28, Last sequence update)
DT
     10-OCT-2003 (Rel. 42, Last annotation update)
DT
     Rugosauperolein II ([Lys5,Thr6]physalaemin).
os
     Uperoleia rugosa (Wrinkled toadlet).
     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC
     Amphibia; Batrachia; Anura; Neobatrachia; Hyloidea; Myobatrachidae;
OC
OC
     Myobatrachinae; Uperoleia.
     NCBI_TaxID=8368;
OX
RN
     [1]
RP
     SEQUENCE.
     TISSUE=Skin secretion;
RC
     MEDLINE=80223080; PubMed=7389029;
RX
     Nakajima T., Yasuhara T., Erspamer V., Erspamer G.F., Negri L.;
RA
     "Physalaemin- and bombesin-like peptides in the skin of the
RT
     Australian leptodactylid frog Uperoleia rugosa.";
RT
     Chem. Pharm. Bull. 28:689-695(1980).
RL
     -!- FUNCTION: Tachykinins are active peptides which excite neurons,
CC
         evoke behavioral responses, are potent vasodilators and
CC
         secretagogues, and contract (directly or indirectly) many smooth
CC
CC
         muscles.
     -!- SUBCELLULAR LOCATION: Secreted.
CC
     -!- TISSUE SPECIFICITY: Skin.
CC
     -!- SIMILARITY: Belongs to the tachykinin family.
CC
     InterPro; IPR002040; Tachy Neurokinin.
DR
     Pfam; PF02202; Tachykinin; 1.
DR
     PROSITE; PS00267; TACHYKININ; 1.
DR
     Amphibian defense peptide; Tachykinin; Neuropeptide; Amidation;
KW
KW
     Pyrrolidone carboxylic acid.
                                   PYRROLIDONE CARBOXYLIC ACID.
FT
     MOD RES
                   1
                           1
                                   AMIDATION.
FΤ
     MOD RES
                  11
                         11
                11 AA; 1270 MW; 3293693E59D1A327 CRC64;
SQ
     SEQUENCE
                          18.2%; Score 2; DB 1; Length 11;
  Query Match
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Best Local Similarity 100.0%; Pred. No. 1.1e+04;
             2; Conservative 0; Mismatches
                                                                  0; Gaps
                                                                              0;
                                                   0; Indels
          10 LM 11
Qу
              11
Db
          10 LM 11
RESULT 14
TKN3 PSEGU
                                           11 AA.
                    STANDARD;
                                   PRT;
     TKN3 PSEGU
ID
AC
     P42988;
     01-NOV-1995 (Rel. 32, Created)
DT
     01-NOV-1995 (Rel. 32, Last sequence update)
DT
     10-OCT-2003 (Rel. 42, Last annotation update)
DT
     Kassinin-like peptide K-III (PG-KIII).
DE
     Pseudophryne quentheri (Guenther's toadlet).
OS
     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC
     Amphibia; Batrachia; Anura; Neobatrachia; Hyloidea; Myobatrachidae;
OC
     Myobatrachinae; Pseudophryne.
OC
OX
     NCBI TaxID=30349;
RN
     [1]
RP
     SEQUENCE.
     TISSUE=Skin secretion;
RC
     MEDLINE=90287814; PubMed=2356157;
RX
     Simmaco M., Severini C., de Biase D., Barra D., Bossa F.,
RA
     Roberts J.D., Melchiorri P., Erspamer V.;
RA
     "Six novel tachykinin- and bombesin-related peptides from the skin of
RT
     the Australian frog Pseudophryne guntheri.";
RT
     Peptides 11:299-304(1990).
RL
     -!- FUNCTION: Tachykinins are active peptides which excite neurons,
CC
         evoke behavioral responses, are potent vasodilators and
CC
         secretagogues, and contract (directly or indirectly) many smooth
CC
CC
         muscles.
     -!- SUBCELLULAR LOCATION: Secreted.
CC
     -!- TISSUE SPECIFICITY: Skin.
CC
     -!- SIMILARITY: Belongs to the tachykinin family.
CC
     PIR; D60409; D60409.
DR
     InterPro; IPR002040; Tachy Neurokinin.
DR
     InterPro; IPR008215; Tachykinin.
DR
     Pfam; PF02202; Tachykinin; 1.
DR
     SMART; SM00203; TK; 1.
DR
     PROSITE; PS00267; TACHYKININ; 1.
     Amphibian defense peptide; Tachykinin; Neuropeptide; Amidation;
KW
     Pyrrolidone carboxylic acid.
KW
                                   PYRROLIDONE CARBOXYLIC ACID.
     MOD RES
                   1
                          1
FT
                                   AMIDATION.
     MOD RES
                  11
                          11
FT
                                  3DBA7C37C9CB1457 CRC64;
                11 AA; 1268 MW;
SO
     SEQUENCE
                           18.2%; Score 2; DB 1; Length 11;
  Query Match
                           100.0%; Pred. No. 1.1e+04;
  Best Local Similarity
                                                                               0;
                                                    0; Indels
                                                                   0; Gaps
             2; Conservative
                                0; Mismatches
  Matches
           10 LM 11
Qу
               11
           10 LM 11
Db
```

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RESULT 15
TKN4 PSEGU
ID
     TKN4 PSEGU
                    STANDARD;
                                    PRT:
                                            11 AA.
AC
     P42989;
     01-NOV-1995 (Rel. 32, Created)
DT
     01-NOV-1995 (Rel. 32, Last sequence update)
DT
     10-OCT-2003 (Rel. 42, Last annotation update)
DT
     Substance P-like peptide I (PG-SPI).
DE
     Pseudophryne guentheri (Guenther's toadlet).
OS
     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC
     Amphibia; Batrachia; Anura; Neobatrachia; Hyloidea; Myobatrachidae;
OC
     Myobatrachinae; Pseudophryne.
OC
OX
     NCBI TaxID=30349;
RN
     [1]
     SEQUENCE.
RP
     TISSUE=Skin secretion;
RC
     MEDLINE=90287814; PubMed=2356157;
RX
     Simmaco M., Severini C., de Biase D., Barra D., Bossa F.,
RA
     Roberts J.D., Melchiorri P., Erspamer V.;
RA
     "Six novel tachykinin- and bombesin-related peptides from the skin of
RT
     the Australian frog Pseudophryne guntheri.";
RT
     Peptides 11:299-304(1990).
RL
     -!- FUNCTION: Tachykinins are active peptides which excite neurons,
CC
         evoke behavioral responses, are potent vasodilators and
CC
         secretagogues, and contract (directly or indirectly) many smooth
CC
CC
         muscles.
CC
     -!- SUBCELLULAR LOCATION: Secreted.
     -!- TISSUE SPECIFICITY: Skin.
CC
     -!- SIMILARITY: Belongs to the tachykinin family.
CC
DR
     PIR; E60409; E60409.
     InterPro; IPR002040; Tachy_Neurokinin.
DR
     InterPro; IPR008215; Tachykinin.
DR
     Pfam; PF02202; Tachykinin; 1.
DR
     SMART; SM00203; TK; 1.
DR
     PROSITE; PS00267; TACHYKININ; 1.
DR
     Amphibian defense peptide; Tachykinin; Neuropeptide; Amidation;
ΚW
     Pyrrolidone carboxylic acid.
KW
                                   PYRROLIDONE CARBOXYLIC ACID.
     MOD RES
                   1
FT
                          1
FT
     MOD RES
                  11
                          11
                                   AMIDATION.
                11 AA; 1294 MW;
                                   3A247C2CC9CB1AB7 CRC64;
SQ
     SEQUENCE
                          18.2%; Score 2; DB 1; Length 11;
  Query Match
                                    Pred. No. 1.1e+04;
  Best Local Similarity
                          100.0%;
                                  0; Mismatches
                                                     0;
                                                         Indels
                                                                   0;
                                                                       Gaps
                                                                               0;
  Matches
             2; Conservative
           10 LM 11
Qу
               II
           10 LM 11
Db
RESULT 16
TKN5 PSEGU
                                            11 AA.
     TKN5 PSEGU
                     STANDARD;
                                    PRT:
ID
AC
     P42990;
     01-NOV-1995 (Rel. 32, Created)
DT
     01-NOV-1995 (Rel. 32, Last sequence update)
DT
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10-OCT-2003 (Rel. 42, Last annotation update)
DT
     Substance P-like peptide II (PG-SPII).
DE
     Pseudophryne guentheri (Guenther's toadlet).
OS
     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC
     Amphibia; Batrachia; Anura; Neobatrachia; Hyloidea; Myobatrachidae;
OC
OC
     Myobatrachinae; Pseudophryne.
     NCBI TaxID=30349;
ΟX
RN
     [1]
     SEQUENCE.
RP
     TISSUE=Skin secretion;
RC
     MEDLINE=90287814; PubMed=2356157;
     Simmaco M., Severini C., de Biase D., Barra D., Bossa F.,
RA
     Roberts J.D., Melchiorri P., Erspamer V.;
RA
     "Six novel tachykinin- and bombesin-related peptides from the skin of
RT
     the Australian frog Pseudophryne guntheri.";
RT
RL
     Peptides 11:299-304(1990).
     -!- FUNCTION: Tachykinins are active peptides which excite neurons,
CC
         evoke behavioral responses, are potent vasodilators and
CC
         secretagogues, and contract (directly or indirectly) many smooth
CC
CC
         muscles.
     -!- SUBCELLULAR LOCATION: Secreted.
CC
     -!- TISSUE SPECIFICITY: Skin.
CC
     -!- SIMILARITY: Belongs to the tachykinin family.
CC
     PIR; F60409; F60409.
DR
     InterPro; IPR002040; Tachy_Neurokinin.
DR
     InterPro; IPR008215; Tachykinin.
DR
     Pfam; PF02202; Tachykinin; 1.
DR
     SMART; SM00203; TK; 1.
     PROSITE; PS00267; TACHYKININ; 1.
DR
     Amphibian defense peptide; Tachykinin; Neuropeptide; Amidation;
KW
     Pyrrolidone carboxylic acid.
KW
                                   PYRROLIDONE CARBOXYLIC ACID.
FT
     MOD RES
                   1
                          1
     MOD RES
                  11
                         11
                                  AMIDATION.
FT
     SEQUENCE
                11 AA; 1293 MW;
                                  3A247C2CC9CB1457 CRC64;
SO
                          18.2%; Score 2; DB 1; Length 11;
  Query Match
                          100.0%; Pred. No. 1.1e+04;
  Best Local Similarity
                                                    0; Indels
                                                                               0;
  Matches
             2; Conservative
                                 0; Mismatches
                                                                       Gaps
           10 LM 11
Qу
              11
Db
           10 LM 11
RESULT 17
TKNA CHICK
                                    PRT;
     TKNA CHICK
                    STANDARD;
ID
     P19850;
AC
     01-FEB-1991 (Rel. 17, Created)
DT
     01-FEB-1991 (Rel. 17, Last sequence update)
DT
     10-OCT-2003 (Rel. 42, Last annotation update)
DT
     Substance P.
DΕ
     Gallus gallus (Chicken).
     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC
     Archosauria; Aves; Neognathae; Galliformes; Phasianidae; Phasianinae;
OC
OC
     Gallus.
OX
     NCBI TaxID=9031;
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RN
     [1]
RP
     SEQUENCE.
RC
     TISSUE=Intestine;
RX
     MEDLINE=88204263; PubMed=2452461;
     Conlon J.M., Katsoulis S., Schmidt W.E., Thim L.;
RA
     "[Arg3]substance P and neurokinin A from chicken small intestine.";
RT
     Regul. Pept. 20:171-180(1988).
RL
     -!- FUNCTION: Tachykinins are active peptides which excite neurons,
CC
         evoke behavioral responses, are potent vasodilators and
CC
         secretagogues, and contract (directly or indirectly) many smooth
CC
CC
     -!- SUBCELLULAR LOCATION: Secreted.
CC
     -!- SIMILARITY: Belongs to the tachykinin family.
CC
     PIR; JN0023; JN0023.
DR
     InterPro; IPR002040; Tachy Neurokinin.
DR
     Pfam; PF02202; Tachykinin; 1.
DR
     PROSITE; PS00267; TACHYKININ; 1.
DR
     Tachykinin; Neuropeptide; Amidation; Neurotransmitter.
KW
                                  AMIDATION.
                  11
                         11
FT
     MOD RES
                        1377 MW;
                                  21487FE3C9D6C6C7 CRC64;
     SEQUENCE
                11 AA;
SQ
                          18.2%; Score 2; DB 1; Length 11;
  Query Match
                          100.0%; Pred. No. 1.1e+04;
  Best Local Similarity
                                                                               0;
                                                                   0;
                                                                       Gaps
                                 0; Mismatches
                                                    0;
                                                       Indels
  Matches
             2: Conservative
           10 LM 11
Qy
              11
Db
           10 LM 11
RESULT 18
TKNA GADMO
                                    PRT;
                                            11 AA.
     TKNA GADMO
                    STANDARD;
ID
     P28498;
AC
     01-DEC-1992 (Rel. 24, Created)
DT
     01-DEC-1992 (Rel. 24, Last sequence update)
DT
     10-OCT-2003 (Rel. 42, Last annotation update)
DT
     Substance P.
DE
     Gadus morhua (Atlantic cod).
OS
     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC
     Actinopterygii; Neopterygii; Teleostei; Euteleostei; Neoteleostei;
OC
     Acanthomorpha; Paracanthopterygii; Gadiformes; Gadidae; Gadus.
OC
     NCBI TaxID=8049;
OX
RN
     [1]
RP
     SEQUENCE.
     TISSUE=Brain;
RC
     MEDLINE=92298992; PubMed=1376687;
RX
     Jensen J., Conlon J.M.;
RA
     "Substance-P-related and neurokinin-A-related peptides from the brain
RT
     of the cod and trout.";
RT
     Eur. J. Biochem. 206:659-664(1992).
RL
     -!- FUNCTION: Tachykinins are active peptides which excite neurons,
CC
         evoke behavioral responses, are potent vasodilators and
CC
         secretagogues, and contract (directly or indirectly) many smooth
CC
CC
         muscles.
     -!- SUBCELLULAR LOCATION: Secreted.
CC
     -!- SIMILARITY: Belongs to the tachykinin family.
CC
```

```
PIR; S23306; S23306.
DR
     InterPro; IPR002040; Tachy Neurokinin.
DR
     InterPro; IPR008215; Tachykinin.
DR
     Pfam; PF02202; Tachykinin; 1.
DR
     SMART; SM00203; TK; 1.
DR
     PROSITE; PS00267; TACHYKININ; 1.
DR
     Tachykinin; Neuropeptide; Amidation; Neurotransmitter.
KW
                                  AMIDATION (BY SIMILARITY).
                  11
                         11
FT
     MOD RES
                                  214860D759D6C6C7 CRC64;
     SEQUENCE -
                11 AA; 1315 MW;
SQ
                          18.2%; Score 2; DB 1; Length 11;
  Query Match
  Best Local Similarity 100.0%; Pred. No. 1.1e+04;
                                                                               0;
                                0; Mismatches
                                                    0; Indels
                                                                      Gaps
  Matches
           2; Conservative
           10 LM 11
Qу
              Db
           10 LM 11
RESULT 19
TKNA HORSE
                                    PRT;
                                            11 AA.
ID
     TKNA HORSE
                    STANDARD;
AC
     P01290;
     21-JUL-1986 (Rel. 01, Created)
DT
     21-JUL-1986 (Rel. 01, Last sequence update)
DT
     10-OCT-2003 (Rel. 42, Last annotation update)
DE
     Substance P.
     TAC1 OR NKNA OR TAC2 OR NKA.
GN
     Equus caballus (Horse), and
OS
     Cavia porcellus (Guinea pig).
OS
     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC
     Mammalia; Eutheria; Perissodactyla; Equidae; Equus.
OC
     NCBI TaxID=9796, 10141;
OX
RN
     [1]
     SEQUENCE.
RP
RC
     SPECIES=Horse;
     Studer R.O., Trzeciak A., Lergier W.;
RA
     "Isolation and amino-acid sequence of substance P from horse
RT
RT
     intestine.";
     Helv. Chim. Acta 56:860-866(1973).
RL
RN
     [2]
     SEQUENCE.
RP
RC
     SPECIES=C.porcellus;
     MEDLINE=90044685; PubMed=2478925;
RX
     Murphy R.;
RA
     "Primary amino acid sequence of guinea-pig substance P.";
RT
     Neuropeptides 14:105-110(1989).
RL
     -!- FUNCTION: Tachykinins are active peptides which excite neurons,
CC
         evoke behavioral responses, are potent vasodilators and
CC
         secretagogues, and contract (directly or indirectly) many smooth
CC
CC
         muscles.
CC
     -!- SUBCELLULAR LOCATION: Secreted.
     -!- SIMILARITY: Belongs to the tachykinin family.
CC
     PIR; A01558; SPHO.
DR
     PIR; A60654; A60654.
DR
     InterPro; IPR002040; Tachy_Neurokinin.
DR
     InterPro; IPR008215; Tachykinin.
DR
```

```
Pfam; PF02202; Tachykinin; 1.
DR
     SMART; SM00203; TK; 1.
DR
     PROSITE; PS00267; TACHYKININ; 1.
DR
     Tachykinin; Neuropeptide; Amidation; Neurotransmitter.
KW
                         11
                                  AMIDATION.
     MOD RES
                  11
FT
                        1349 MW;
                                  3E757FE3C9D6C6C7 CRC64;
     SEQUENCE
                11 AA;
SQ
                          18.2%; Score 2; DB 1; Length 11;
  Query Match
                          100.0%;
                                   Pred. No. 1.1e+04;
  Best Local Similarity
                                 0; Mismatches
                                                                  0;
                                                                      Gaps
                                                                               0;
                                                    0;
                                                        Indels
             2; Conservative
           10 LM 11
Qу
Db
           10 LM 11
RESULT 20
TKNA ONCMY
                                            11 AA.
                    STANDARD;
                                    PRT;
ID
     TKNA ONCMY
     P28499;
AC
     01-DEC-1992 (Rel. 24, Created)
DT
     01-DEC-1992 (Rel. 24, Last sequence update)
DT
     10-OCT-2003 (Rel. 42, Last annotation update)
DΤ
DE
     Substance P.
     Oncorhynchus mykiss (Rainbow trout) (Salmo gairdneri).
OS
     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC
     Actinopterygii; Neopterygii; Teleostei; Euteleostei;
OC
     Protacanthopterygii; Salmoniformes; Salmonidae; Oncorhynchus.
OC
     NCBI TaxID=8022;
OX
RN
     [1]
RP
     SEQUENCE.
RC
     TISSUE=Brain;
     MEDLINE=92298992; PubMed=1376687;
RX
     Jensen J., Conlon J.M.;
RA
     "Substance-P-related and neurokinin-A-related peptides from the brain
RT
     of the cod and trout.";
RT
     Eur. J. Biochem. 206:659-664(1992).
RL
     -!- FUNCTION: Tachykinins are active peptides which excite neurons,
CC
         evoke behavioral responses, are potent vasodilators and
CC
         secretagogues, and contract (directly or indirectly) many smooth
CC
         muscles.
CC
     -!- SUBCELLULAR LOCATION: Secreted.
CC
     -!- SIMILARITY: Belongs to the tachykinin family.
CC
     PIR: S23308; S23308.
DR
     InterPro; IPR002040; Tachy Neurokinin.
DR
     InterPro; IPR008215; Tachykinin.
DR
     Pfam; PF02202; Tachykinin; 1.
DR
     SMART; SM00203; TK; 1.
DR
     PROSITE; PS00267; TACHYKININ; 1.
DR
     Tachykinin; Neuropeptide; Amidation; Neurotransmitter.
KW
                                   AMIDATION (BY SIMILARITY).
FT
     MOD RES
                   11
                          11
                                   214860DEC9D6D1F7 CRC64;
SQ
     SEQUENCE
                 11 AA; 1358 MW;
                           18.2%; Score 2; DB 1; Length 11;
  Query Match
                           100.0%; Pred. No. 1.1e+04;
  Best Local Similarity
                                                                       Gaps
                                                                               0:
                                 0; Mismatches
                                                    0; Indels
                                                                   0:
             2; Conservative
  Matches
```

```
10 LM 11
Qy
              | |
           10 LM 11
Db
RESULT 21
TKNA RANCA
                                    PRT;
                                            11 AA.
                    STANDARD;
ID
     TKNA RANCA
AC
     P22688;
DT
     01-AUG-1991 (Rel. 19, Created)
     01-AUG-1991 (Rel. 19, Last sequence update)
DT
     10-OCT-2003 (Rel. 42, Last annotation update)
DT
     Ranatachykinin A (RTK A).
DE
OS
     Rana catesbeiana (Bull frog).
     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC
     Amphibia; Batrachia; Anura; Neobatrachia; Ranoidea; Ranidae; Rana.
OC
OX
     NCBI TaxID=8400;
RN
     [1]
     SEQUENCE, AND SYNTHESIS.
RP
     TISSUE=Brain, and Intestine;
RC
     MEDLINE=91254337; PubMed=2043143;
RX
     Kozawa H., Hino J., Minamino N., Kangawa K., Matsuo H.;
RA
     "Isolation of four novel tachykinins from frog (Rana catesbeiana)
RT
RT
     brain and intestine.";
     Biochem. Biophys. Res. Commun. 177:588-595(1991).
RL
RN
     SEQUENCE.
RP
     TISSUE=Intestine;
RC
     MEDLINE=94023216; PubMed=8210506;
RX
     Kangawa K., Kozawa H., Hino J., Minamino N., Matsuo H.;
RA
     "Four novel tachykinins in frog (Rana catesbeiana) brain and
RT
RT
     intestine.";
     Regul. Pept. 46:81-88(1993).
RL
     -!- FUNCTION: Tachykinins are active peptides which excite neurons,
CC'
         evoke behavioral responses, are potent vasodilators and
CC
         secretagogues, and contract (directly or indirectly) many smooth
CC
         muscles.
CC
     -!- SUBCELLULAR LOCATION: Secreted.
CC
     -!- SIMILARITY: Belongs to the tachykinin family.
CC
     PIR; A61033; A61033.
DR
     InterPro; IPR002040; Tachy_Neurokinin.
DR
     InterPro; IPR008215; Tachykinin.
DR
     Pfam; PF02202; Tachykinin; 1.
DR
     SMART; SM00203; TK; 1.
DR
     PROSITE; PS00267; TACHYKININ; 1.
DR
     Tachykinin; Neuropeptide; Amidation.
KW
                                   AMIDATION.
FT
     MOD RES
                  11
                         11
                11 AA; 1311 MW; 200D60CC59D40AB7 CRC64;
     SEOUENCE
SO
                           18.2%; Score 2; DB 1; Length 11;
  Query Match
                          100.0%; Pred. No. 1.1e+04;
  Best Local Similarity
                                                        Indels
                                                                   0; Gaps
                                                                               0;
  Matches
             2; Conservative
                                 0; Mismatches
                                                    0;
           10 LM 11
Qy
               11
```

10 LM 11

Db

```
RESULT 22
TKNA RANRI
     TKNA RANRI
                    STANDARD;
                                   PRT;
                                            11 AA.
ID
AC
     P29207;
     01-DEC-1992 (Rel. 24, Created)
DT
     01-DEC-1992 (Rel. 24, Last sequence update)
DT
     10-OCT-2003 (Rel. 42, Last annotation update)
DT
     Ranakinin (Substance-P-related peptide).
DE
     Rana ridibunda (Laughing frog) (Marsh frog).
OS
     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC
     Amphibia; Batrachia; Anura; Neobatrachia; Ranoidea; Ranidae; Rana.
OC
OX
     NCBI_TaxID=8406;
RN
     [1]
RP
     SEQUENCE.
     TISSUE=Brain;
RC
     MEDLINE=92044543; PubMed=1658233;
RX
     O'Harte F., Burcher E., Lovas S., Smith D.D., Vaudry H., Conlon J.M.;
RA
     "Ranakinin: a novel NK1 tachykinin receptor agonist isolated with
RT
     neurokinin B from the brain of the frog Rana ridibunda.";
RT
     J. Neurochem. 57:2086-2091(1991).
RL
     -!- FUNCTION: Tachykinins are active peptides which excite neurons,
CC
         evoke behavioral responses, are potent vasodilators and
CC
         secretagogues, and contract (directly or indirectly) many smooth
CC
         muscles.
CC
     -!- SUBCELLULAR LOCATION: Secreted.
CC
     -!- SIMILARITY: Belongs to the tachykinin family.
CC
     InterPro; IPR002040; Tachy Neurokinin.
DR
     InterPro; IPR008215; Tachykinin.
DR
     Pfam; PF02202; Tachykinin; 1.
DR
     SMART; SM00203; TK; 1.
DR
     PROSITE; PS00267; TACHYKININ; 1.
DR
     Tachykinin; Neuropeptide; Amidation.
KW
                                   AMIDATION.
                         11
FT
     MOD RES
                  11
                                   3A2460CC59D40B07 CRC64;
                        1352 MW;
     SEQUENCE
                11 AA;
SO
                                   Score 2; DB 1; Length 11;
                           18.2%;
  Query Match
                          100.0%; Pred. No. 1.1e+04;
  Best Local Similarity
                                                                   0; Gaps
                                                                               0;
             2; Conservative 0; Mismatches
                                                    0; Indels
           10 LM 11
QУ
               II
           10 LM 11
RESULT 23
TKNA SCYCA
                                    PRT;
                                            11 AA.
                     STANDARD;
     TKNA SCYCA
ID
     P41333;
AC
     01-FEB-1995 (Rel. 31, Created)
DT
     01-FEB-1995 (Rel. 31, Last sequence update)
     10-OCT-2003 (Rel. 42, Last annotation update)
DT
DΕ
     Substance P.
     Scyliorhinus canicula (Spotted dogfish) (Spotted catshark).
OS
     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Chondrichthyes;
OC
     Elasmobranchii; Galeomorphii; Galeoidea; Carcharhiniformes;
OC
     Scyliorhinidae; Scyliorhinus.
OC
```

```
OX
    NCBI TaxID=7830;
RN
     [1]
     SEQUENCE.
RP
RC
     TISSUE=Brain;
    MEDLINE=93292508; PubMed=7685693;
RX
     Waugh D., Wang Y., Hazon N., Balment R.J., Conlon J.M.;
RA
     "Primary structures and biological activities of substance-P-related
RT
     peptides from the brain of the dogfish, Scyliorhinus canicula.";
RT
     Eur. J. Biochem. 214:469-474(1993).
RL
     -!- FUNCTION: Tachykinins are active peptides which excite neurons,
CC
         evoke behavioral responses, are potent vasodilators and
CC
         secretagogues, and contract (directly or indirectly) many smooth
CC
CC
         muscles.
CC
     -!- SUBCELLULAR LOCATION: Secreted.
     -!- SIMILARITY: Belongs to the tachykinin family.
CC
DR
     PIR; S33300; S33300.
     InterPro; IPR002040; Tachy Neurokinin.
DR
DR
     PROSITE; PS00267; TACHYKININ; 1.
     Tachykinin; Neuropeptide; Amidation; Neurotransmitter.
KW
                                  AMIDATION.
FΤ
     MOD RES
                  11
                         11
                11 AA; 1278 MW; 214860DEC9D6D867 CRC64;
     SEQUENCE
SQ
                          18.2%; Score 2; DB 1; Length 11;
  Query Match
                          100.0%; Pred. No. 1.1e+04;
  Best Local Similarity
                                0; Mismatches
                                                    0; Indels
                                                                  0;
             2; Conservative
  Matches
           10 LM 11
Qу
              \mathbf{H}
           10 LM 11
Db
RESULT 24
TKN ELEMO
                                    PRT;
                                            11 AA.
                    STANDARD;
     TKN ELEMO
     P01293;
AC
     21-JUL-1986 (Rel. 01, Created)
DT
     01-FEB-1994 (Rel. 28, Last sequence update)
DΤ
     10-OCT-2003 (Rel. 42, Last annotation update)
DT
     Eledoisin.
DE
     Eledone moschata (Musky octopus) (Ozaena moschata), and
OS
     Eledone cirrhosa (Curled octopus) (Ozaena cirrosa).
OS
     Eukaryota; Metazoa; Mollusca; Cephalopoda; Coleoidea; Neocoleoidea;
OC
     Octopodiformes; Octopoda; Incirrata; Octopodidae; Eledone.
OC
     NCBI TaxID=6641, 102876;
OX
RN
     [1]
     SEQUENCE.
RP
     Anastasi A., Erspamer V.;
RA
     "The isolation and amino acid sequence of eledoisin, the active
RT
     endecapeptide of the posterior salivary glands of Eledone.";
RT
     Arch. Biochem. Biophys. 101:56-65(1963).
RL
     -!- FUNCTION: Tachykinins are active peptides which excite neurons,
CC
         evoke behavioral responses, are potent vasodilators and
CC
         secretagogues, and contract (directly or indirectly) many smooth
CC
CC
         muscles.
     -!- SUBCELLULAR LOCATION: Secreted.
CC
     -!- TISSUE SPECIFICITY: Skin.
CC
     -!- SIMILARITY: Belongs to the tachykinin family.
CC
```

```
PIR; A01561; EOOC.
DR
     PIR; B01561; EOOCC.
DR
     PDB; 1MXQ; 18-FEB-03.
DR
     InterPro; IPR002040; Tachy_Neurokinin.
DR
     PROSITE; PS00267; TACHYKININ; 1.
DR
     Tachykinin; Neuropeptide; Amidation; Pyrrolidone carboxylic acid;
KW
     3D-structure.
KW
                                   PYRROLIDONE CARBOXYLIC ACID.
                   1
                          1
     MOD RES
FT
                                   AMIDATION.
     MOD RES
                  11
                         11
FT
                                  570D7C2559CDDAA3 CRC64;
     SEQUENCE
                11 AA;
                        1206 MW;
SO
                          18.2%; Score 2; DB 1; Length 11;
  Query Match
                          100.0%; Pred. No. 1.1e+04;
  Best Local Similarity
                                                                               0;
                                 0; Mismatches
                                                       Indels
                                                                   0; Gaps
                                                    0;
             2: Conservative
           10 LM 11
Qу
              11
Db
           10 LM 11
RESULT 25
TKN PHYFU
                                            11 AA.
                    STANDARD;
                                    PRT;
ID
     TKN PHYFU
AC
     P08615;
     01-AUG-1988 (Rel. 08, Created)
DT
     01-FEB-1994 (Rel. 28, Last sequence update)
DT
     10-OCT-2003 (Rel. 42, Last annotation update)
DT
     Physalaemin.
DΕ
     Physalaemus fuscumaculatus (Neotropical frog).
OS
     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC
     Amphibia; Batrachia; Anura; Neobatrachia; Hyloidea; Leptodactylidae;
OC
     Leptodactylinae; Physalaemus.
OC
     NCBI TaxID=8378;
OX
RN
     [1]
     SEQUENCE.
RP
     TISSUE=Skin secretion;
RC
     MEDLINE=66076612; PubMed=5857249;
RX
     Erspamer V., Anastasi A., Bertaccini G., Cei J.M.;
RA
     "Structure and pharmacological actions of physalaemin, the main
RT
     active polypeptide of the skin of Physalaemus fuscumaculatus.";
RT
     Experientia 20:489-490(1964).
RL
     -!- FUNCTION: Tachykinins are active peptides which excite neurons,
CC
         evoke behavioral responses, are potent vasodilators and
CC
         secretagogues, and contract (directly or indirectly) many smooth
CC
         muscles.
CC
     -!- SUBCELLULAR LOCATION: Secreted.
CC
     -!- TISSUE SPECIFICITY: Skin.
CC
     -!- SIMILARITY: Belongs to the tachykinin family.
CC
DR
     PIR; S07201; S07201.
     InterPro; IPR002040; Tachy_Neurokinin.
DR
DR
     Pfam; PF02202; Tachykinin; 1.
     PROSITE; PS00267; TACHYKININ; 1.
DR
     Amphibian defense peptide; Tachykinin; Neuropeptide; Amidation;
KW
     Pyrrolidone carboxylic acid.
KW
                                   PYRROLIDONE CARBOXYLIC ACID.
FT
     MOD RES
                    1
                           1
                                   AMIDATION.
     MOD RES
                   11
                          11
FT
                 11 AA; 1283 MW; 3293693E59C33457 CRC64;
     SEQUENCE
SQ
```

```
18.2%; Score 2; DB 1; Length 11;
                          100.0%; Pred. No. 1.1e+04;
  Best Local Similarity
                                                                                0;
                                0; Mismatches
                                                        Indels
                                                                       Gaps
             2; Conservative
                                                     0;
  Matches
           10 LM 11
Qу
              \mathbf{I}
           10 LM 11
Db
RESULT 26
UXB2 YEAST
                                    PRT;
                                            11 AA.
     UXB2 YEAST
                     STANDARD;
ID
AC
     P99013;
     01-NOV-1995 (Rel. 32, Created)
DT
     01-NOV-1995 (Rel. 32, Last sequence update)
DΤ
     15-MAR-2004 (Rel. 43, Last annotation update)
DT
     Unknown protein from 2D-page (Spot 2D-000K2F) (Fragment).
DE
     Saccharomyces cerevisiae (Baker's yeast).
OS
     Eukaryota; Fungi; Ascomycota; Saccharomycotina; Saccharomycetes;
OC
     Saccharomycetales; Saccharomycetaceae; Saccharomyces.
OC
     NCBI TaxID=4932;
OX
RN
     [1]
RP
     SEQUENCE.
     STRAIN=X2180-1A;
RC
     Sanchez J.-C., Golaz O., Schaller D., Morch F., Frutiger S.,
RA
     Hughes G.J., Appel R.D., Deshusses J., Hochstrasser D.F.;
RA
     Submitted (AUG-1995) to Swiss-Prot.
RL
     -!- MISCELLANEOUS: On the 2D-gel the determined pI of this unknown
CC
         protein is: 6.20, its MW is: 9.2 kDa.
CC
     SWISS-2DPAGE; P99013; YEAST.
DR
                  11
                          11
FT
     NON TER
                         1328 MW;
                                   EC38021C0DCB42DA CRC64;
                 11 AA;
     SEQUENCE
SQ
                           18.2%; Score 2; DB 1; Length 11;
  Query Match
                           100.0%; Pred. No. 1.1e+04;
  Best Local Similarity
                                 0; Mismatches
                                                     0; Indels
                                                                    0; Gaps
                                                                                0;
             2; Conservative
  Matches
             4 RK 5
Qу
               11
             8 RK 9
Db
RESULT 27
ANGT CRIGE
                                             11 AA.
                                    PRT;
                     STANDARD;
ΙD
     ANGT CRIGE
AC
     P09037;
     01-NOV-1988 (Rel. 09, Created)
DT
     01-NOV-1988 (Rel. 09, Last sequence update)
\mathsf{D}\mathbf{T}
     10-OCT-2003 (Rel. 42, Last annotation update)
DΤ
DE
     Crinia-angiotensin II.
     Crinia georgiana (Quacking frog).
os
     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC
     Amphibia; Batrachia; Anura; Neobatrachia; Hyloidea; Myobatrachidae;
OC
OC
     Myobatrachinae; Crinia.
     NCBI TaxID=8374;
OX
RN
      [1]
```

```
RP
     SEQUENCE.
RC
     TISSUE=Skin secretion;
     MEDLINE=80024575; PubMed=488254;
RX
     Erspamer V., Melchiorri P., Nakajima T., Yasuhara T., Endean R.;
RA
     "Amino acid composition and sequence of crinia-angiotensin, an
RT
     angiotensin II-like endecapeptide from the skin of the Australian
RT
     frog Crinia georgiana.";
RT
     Experientia 35:1132-1133(1979).
RL
     -!- SUBCELLULAR LOCATION: Secreted.
CC
CC
     -!- TISSUE SPECIFICITY: Skin.
     PIR; S07207; S07207.
DR
     Vasoconstrictor.
KW
                                  8A0921F7DB50440A CRC64;
              11 AA; 1271 MW;
     SEQUENCE
SO
                           9.1%; Score 1; DB 1; Length 11;
  Query Match
                          100.0%; Pred. No. 8.7e+04;
  Best Local Similarity
                               0; Mismatches
                                                                      Gaps
                                                                               0;
                                                    0;
                                                       Indels
            1; Conservative
            1 A 1
Qу
Db
            1 A 1
RESULT 28
ASL1 BACSE
                                            11 AA.
     ASL1 BACSE
                    STANDARD;
                                    PRT;
     P83146;
AC
     28-FEB-2003 (Rel. 41, Created)
DT
     28-FEB-2003 (Rel. 41, Last sequence update)
DT
     28-FEB-2003 (Rel. 41, Last annotation update)
DT
     Acharan sulfate lyase 1 (EC 4.2.2.-) (Fragment).
DE
     Bacteroides stercoris.
os
     Bacteria; Bacteroidetes; Bacteroides (class); Bacteroidales;
OC
     Bacteroidaceae; Bacteroides.
OC
     NCBI TaxID=46506;
OX
RN
     SEQUENCE, FUNCTION, ENZYME REGULATION, AND SUBUNIT.
RP
     STRAIN=HJ-15;
RC
     MEDLINE=21223019; PubMed=11322884;
RX
     Kim B.-T., Hong S.-W., Kim W.-S., Kim Y.S., Kim D.-H.;
RA
     "Purification and characterization of acharan sulfate lyases, two
RT
     novel heparinases, from Bacteroides stercoris HJ-15.";
RT
     Eur. J. Biochem. 268:2635-2641(2001).
RL
     -!- FUNCTION: Degrades acharan sulfate and, to a lesser extent,
CC
         heparin and heparan sulfate.
CC
     -!- ENZYME REGULATION: Inhibited by cupric ion, nitrogen and cobalt.
CC
         Activated by reducing agents, such as DL-dithiothreitol and 2-
CC
CC
         mercaptoethanol.
     -!- SUBUNIT: Monomer.
CC
     -!- PTM: The N-terminus is blocked.
CC
     -!- MISCELLANEOUS: Has an isoelectric point of 8.6. Its optimum pH is
CC
          7.2 and optimum temperature 45 degrees Celsius.
CC
     Lyase; Heparin-binding.
KW
FT
     NON TER
                    1
                           1
     NON TER
                   11
                          11
FT
                 11 AA; 1395 MW; 01B2DAA241E865AB CRC64;
     SEQUENCE
SQ
```

```
9.1%; Score 1; DB 1; Length 11;
  Query Match
  Best Local Similarity 100.0%; Pred. No. 8.7e+04;
                                 0; Mismatches 0; Indels
                                                                0; Gaps
                                                                              0;
            1; Conservative
            7 N 7
Qу
            1 N 1
Db
RESULT 29
ASL2 BACSE
                                   PRT;
                                           11 AA.
                    STANDARD;
     ASL2 BACSE
ID
     P83147;
AC
DT
     28-FEB-2003 (Rel. 41, Created)
     28-FEB-2003 (Rel. 41, Last sequence update)
DT
     28-FEB-2003 (Rel. 41, Last annotation update)
DT
     Acharan sulfate lyase 2 (EC 4.2.2.-) (Fragment).
DE
     Bacteroides stercoris.
OS
     Bacteria; Bacteroidetes; Bacteroides (class); Bacteroidales;
OC
     Bacteroidaceae; Bacteroides.
OC
OX
     NCBI TaxID=46506;
RN
     [1]
     SEQUENCE, FUNCTION, ENZYME REGULATION, AND SUBUNIT.
RP
     STRAIN=HJ-15;
RC
     MEDLINE=21223019; PubMed=11322884;
RX
     Kim B.-T., Hong S.-W., Kim W.-S., Kim Y.S., Kim D.-H.;
RA
     "Purification and characterization of acharan sulfate lyases, two
RT
     novel heparinases, from Bacteroides stercoris HJ-15.";
RT
     Eur. J. Biochem. 268:2635-2641(2001).
RL
     -!- FUNCTION: Degrades acharan sulfate and, to a lesser extent,
CC
         heparin and heparan sulfate.
CC
     -!- ENZYME REGULATION: Inhibited by cupric ion, nitrogen and lead.
CC
         Activated by reducing agents, such as DL-dithiothreitol and 2-
CC
CC
         mercaptoethanol.
     -!- SUBUNIT: Monomer.
CC
     -!- PTM: The N-terminus is blocked.
CC
     -!- MISCELLANEOUS: Has an isoelectric point of 8.6. Its optimum pH is
CC
         7.2 and optimum temperature 45 degrees Celsius.
CC
     Lyase; Heparin-binding.
KW
     NON TER
                   1
                          1
FT
                  11
                         11
     NON TER
FT
                11 AA; 1195 MW; D79D897C7AA451AD CRC64;
     SEOUENCE
SO
                            9.1%; Score 1; DB 1; Length 11;
  Query Match
  Best Local Similarity 100.0%; Pred. No. 8.7e+04;
                                                                               0;
                                  0; Mismatches
                                                    0; Indels
                                                                  0; Gaps
             1; Conservative
  Matches
             1 A 1
Qy
             4 A 4
RESULT 30
BPP3 BOTIN
                                            11 AA.
     BPP3 BOTIN
                     STANDARD;
                                    PRT;
ID
     P30423;
AC
     01-APR-1993 (Rel. 25, Created)
DT
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01-FEB-1994 (Rel. 28, Last sequence update)
DT
    28-FEB-2003 (Rel. 41, Last annotation update)
DT
    Bradykinin-potentiating peptide S4,3,2 (10C) (Angiotensin-converting
DΕ
     enzyme inhibitor).
DΕ
     Bothrops insularis (Island jararaca) (Queimada jararaca).
OS
     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC
     Lepidosauria; Squamata; Scleroglossa; Serpentes; Colubroidea;
OC
     Viperidae; Crotalinae; Bothrops.
OC
     NCBI TaxID=8723;
OX
RN
     [1]
     SEQUENCE.
RP
RC
     TISSUE=Venom;
     MEDLINE=90351557; PubMed=2386615;
RX
     Cintra A.C.O., Vieira C.A., Giglio J.R.;
RA
     "Primary structure and biological activity of bradykinin potentiating
RT
     peptides from Bothrops insularis snake venom.";
RT
     J. Protein Chem. 9:221-227(1990).
RL
     -!- FUNCTION: This peptide both inhibits the activity of the
CC
         angiotensin-converting enzyme and enhances the action of
CC
         bradykinin by inhibiting the kinases that inactivate it.
CC
         It acts as an indirect hypotensive agent.
CC
DR
     PIR; C37196; C37196.
     Hypotensive agent; Pyrrolidone carboxylic acid.
KW
                                  PYRROLIDONE CARBOXYLIC ACID.
FT
                   1
                          1
                                  20B25813C7741777 CRC64;
                11 AA; 1199 MW;
SO
     SEQUENCE
                            9.1%; Score 1; DB 1;
                                                    Length 11;
  Query Match
                          100.0%; Pred. No. 8.7e+04;
  Best Local Similarity
                                                                   0; Gaps
                                                                               0;
                                 0; Mismatches
                                                    0; Indels
             1; Conservative
            6 G 6
Qу
            3 G 3
RESULT 31
BPP4 BOTIN
                                    PRT;
                                            11 AA.
     BPP4 BOTIN
                    STANDARD;
ID
     P30424;
AC
     01-APR-1993 (Rel. 25, Created)
DT ·
     01-FEB-1994 (Rel. 28, Last sequence update)
DT
     28-FEB-2003 (Rel. 41, Last annotation update)
     Bradykinin-potentiating peptide S4,1,2 (Angiotensin-converting
DE
     enzyme inhibitor).
DE
     Bothrops insularis (Island jararaca) (Queimada jararaca).
OS
     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC
     Lepidosauria; Squamata; Scleroglossa; Serpentes; Colubroidea;
OC
     Viperidae; Crotalinae; Bothrops.
OC
     NCBI TaxID=8723;
OX
RN
     [1]
     SEQUENCE.
RP
     TISSUE=Venom;
RC
     MEDLINE=90351557; PubMed=2386615;
RX
     Cintra A.C.O., Vieira C.A., Giglio J.R.;
RA
     "Primary structure and biological activity of bradykinin potentiating
RT
     peptides from Bothrops insularis snake venom.";
RT
     J. Protein Chem. 9:221-227(1990).
RL
```

```
-!- FUNCTION: This peptide both inhibits the activity of the
CC
         angiotensin-converting enzyme and enhances the action of
CC
         bradykinin by inhibiting the kinases that inactivate it.
CC
         It acts as an indirect hypotensive agent.
CC
DR
     PIR; D37196; D37196.
     Hypotensive agent; Pyrrolidone carboxylic acid.
KW
                                  PYRROLIDONE CARBOXYLIC ACID.
                   1
                         1
FT
                11 AA; 1143 MW; 20BBBF13C7741777 CRC64;
     SEQUENCE
SQ
                           9.1%; Score 1; DB 1; Length 11;
  Query Match
                          100.0%; Pred. No. 8.7e+04;
  Best Local Similarity
                                                                              0;
                                                       Indels
                                                                      Gaps
                                 0; Mismatches
                                                    0;
            1; Conservative
  Matches
            6 G 6
Qу
            2 G 2
Db
RESULT 32
BPPB AGKHA
                                   PRT;
                                           11 AA.
ID
     BPPB AGKHA
                    STANDARD;
AC
     P01021;
DT
     21-JUL-1986 (Rel. 01, Created)
     01-FEB-1994 (Rel. 28, Last sequence update)
DT
     28-FEB-2003 (Rel. 41, Last annotation update)
DT
     Bradykinin-potentiating peptide B (Angiotensin-converting
DE
     enzyme inhibitor).
DΕ
     Agkistrodon halys blomhoffi (Mamushi) (Gloydius blomhoffii).
OS
     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC
     Lepidosauria; Squamata; Scleroglossa; Serpentes; Colubroidea;
OC
     Viperidae; Crotalinae; Gloydius.
OC
     NCBI TaxID=242054;
OX
RN
     [1]
     SEQUENCE.
RP
     TISSUE=Venom;
RC
     Kato H., Suzuki T.;
RA
     "Amino acid sequence of bradykinin-potentiating peptide isolated from
RT
     the venom of Agkistrodon halys blomhoffii.";
RT
     Proc. Jpn. Acad., B, Phys. Biol. Sci. 46:176-181(1970).
RL
     -!- FUNCTION: This peptide both inhibits the activity of the
CC
         angiotensin-converting enzyme and enhances the action of
CC
         bradykinin by inhibiting the kinases that inactivate it.
CC
         It acts as an indirect hypotensive agent.
CC
     PIR; A01254; XASNBA.
DR
     Hypotensive agent; Pyrrolidone carboxylic acid.
KW
                                  PYRROLIDONE CARBOXYLIC ACID.
FT
     MOD RES
                   1
                         1
                                  295CBF0627741777 CRC64;
     SEQUENCE
                11 AA; 1199 MW;
SO
                            9.1%; Score 1; DB 1; Length 11;
  Query Match
                          100.0%; Pred. No. 8.7e+04;
  Best Local Similarity
                                                                               0;
                                                    0; Indels
                                                                  0; Gaps
             1; Conservative
                               0; Mismatches
  Matches
            6 G 6
Qу
            2 G 2
Db
```

```
RESULT 33
BPP AGKHP
                                            11 AA.
                    STANDARD;
                                    PRT:
ID
    BPP AGKHP
AC
     P04562;
     13-AUG-1987 (Rel. 05, Created)
DT
     01-FEB-1994 (Rel. 28, Last sequence update)
DT
     28-FEB-2003 (Rel. 41, Last annotation update)
DT
     Bradykinin-potentiating peptide (Angiotensin-converting
DE
     enzyme inhibitor).
DE
     Agkistrodon halys pallas (Chinese water mocassin) (Gloydius halys
OS
     pallas).
OS
     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC
     Lepidosauria; Squamata; Scleroglossa; Serpentes; Colubroidea;
OC
OC
     Viperidae; Crotalinae; Gloydius.
     NCBI_TaxID=8714;
OX
RN
     [1]
     SEQUENCE.
RP
RC
     TISSUE=Venom;
RX
     MEDLINE=86177022; PubMed=3008123;
     Chi C.-W., Wang S.-Z., Xu L.-G., Wang M.-Y., Lo S.-S., Huang W.-D.;
RA
     "Structure-function studies on the bradykinin potentiating peptide
RT
     from Chinese snake venom (Agkistrodon halys pallas).";
RT
     Peptides 6 Suppl. 3:339-342(1985).
RL
     -!- FUNCTION: This peptide both inhibits the activity of the
CC
         angiotensin-converting enzyme and enhances the action of
CC
         bradykinin by inhibiting the kinases that inactivate it.
CC
         It acts as an indirect hypotensive agent.
CC
     PIR; JC0002; XAVIBH.
DR
     Hypotensive agent; Pyrrolidone carboxylic acid.
KW
                                   PYRROLIDONE CARBOXYLIC ACID.
     MOD RES
                           1
FT
                                   30BABF1277686777 CRC64;
     SEQUENCE
                11 AA; 1112 MW;
SO.
                            9.1%; Score 1; DB 1; Length 11;
  Query Match
                           100.0%; Pred. No. 8.7e+04;
  Best Local Similarity
                                                        Indels
                                                                   0:
                                                                      Gaps
                                  0; Mismatches
                                                    0;
  Matches
             1; Conservative
            6 G 6
Qy
            2 G 2
Db
RESULT 34
CA21 LITCI
                                    PRT;
                                            11 AA.
                     STANDARD;
     CA21 LITCI
ID
AC
     P82087;
     16-OCT-2001 (Rel. 40, Created)
DT
     16-OCT-2001 (Rel. 40, Last sequence update)
DT
     10-OCT-2003 (Rel. 42, Last annotation update)
DT
     Caerulein 2.1/2.1Y4.
DΕ
     Litoria citropa (Australian blue mountains tree frog).
OS
     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC
     Amphibia; Batrachia; Anura; Neobatrachia; Hyloidea; Hylidae;
OC
     Pelodryadinae; Litoria.
OC
     NCBI TaxID=94770;
OX
RN
      [1]
     SEQUENCE, AND MASS SPECTROMETRY.
RΡ
     TISSUE=Skin secretion;
RC
```

```
MEDLINE=20057701; PubMed=10589099;
RX
     Wabnitz P.A., Bowie J.H., Tyler M.J.;
RA
     "Caerulein-like peptides from the skin glands of the Australian blue
RT
     montains tree frog Litoria citropa. Part 1. Sequence determination
RT
     using electrospray mass spectrometry.";
RT
     Rapid Commun. Mass Spectrom. 13:2498-2502(1999).
RL
     -!- FUNCTION: Hypotensive neuropeptide (Probable).
CC
     -!- SUBCELLULAR LOCATION: Secreted.
CC
     -!- TISSUE SPECIFICITY: Skin dorsal glands.
CC
     -!- PTM: Isoform 2.1Y4 differs from isoform 2.1 in not being
CC
CC
     -!- MASS SPECTROMETRY: MW=1372; METHOD=Electrospray.
CC
     -!- SIMILARITY: Belongs to the gastrin/cholecystokinin family.
CC
     InterPro; IPR001651; Gastrin.
DR
     PROSITE; PS00259; GASTRIN; FALSE_NEG.
DR
     Amphibian defense peptide; Hypotensive agent; Amidation; Sulfation;
KW
     Pyrrolidone carboxylic acid.
KW
                                   PYRROLIDONE CARBOXYLIC ACID.
FT
     MOD RES
                   1
                                   SULFATION.
     MOD RES
                   4
                          4
FT
                                   AMIDATION.
FT
     MOD RES
                  11
                         11
                                  10DAB7C4EDD861BB CRC64;
SO
     SEQUENCE
                11 AA;
                        1312 MW;
                           9.1%; Score 1; DB 1; Length 11;
  Query Match
                          100.0%; Pred. No. 8.7e+04;
  Best Local Similarity
                                 0; Mismatches
                                                    0;
                                                        Indels
             1; Conservative
            6 G 6
Qу
            6 G 6
Db
RESULT 35
CA22 LITCI
                                            11 AA.
                                    PRT;
     CA22 LITCI
                    STANDARD;
ID
AC
     P82088;
     16-OCT-2001 (Rel. 40, Created)
DT
     16-OCT-2001 (Rel. 40, Last sequence update)
DT
     10-OCT-2003 (Rel. 42, Last annotation update)
DT
     Caerulein 2.2/2.2Y4.
DE
     Litoria citropa (Australian blue mountains tree frog).
OS
     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC
     Amphibia; Batrachia; Anura; Neobatrachia; Hyloidea; Hylidae;
     Pelodryadinae; Litoria.
OC
     NCBI TaxID=94770;
OX
RN
     SEQUENCE, AND MASS SPECTROMETRY.
RP
     TISSUE=Skin secretion;
RC
     MEDLINE=20057701; PubMed=10589099;
RX
     Wabnitz P.A., Bowie J.H., Tyler M.J.;
RA
      "Caerulein-like peptides from the skin glands of the Australian blue
RT
     montains tree frog Litoria citropa. Part 1. Sequence determination
RT
     using electrospray mass spectrometry.";
RT
     Rapid Commun. Mass Spectrom. 13:2498-2502(1999).
RL
     -!- FUNCTION: Hypotensive neuropeptide (Probable).
CC
     -!- SUBCELLULAR LOCATION: Secreted.
CC
     -!- TISSUE SPECIFICITY: Skin dorsal glands.
CC
     -!- PTM: Isoform 2.2Y4 differs from isoform 2.2 in not being
CC
```

```
CC
         sulfated.
    -!- MASS SPECTROMETRY: MW=1388; METHOD=Electrospray.
CC
     -!- SIMILARITY: Belongs to the gastrin/cholecystokinin family.
CC
    InterPro; IPR001651; Gastrin.
DR
     PROSITE; PS00259; GASTRIN; FALSE_NEG.
DR
    Amphibian defense peptide; Hypotensive agent; Amidation; Sulfation;
KW
     Pyrrolidone carboxylic acid.
KW
                                  PYRROLIDONE CARBOXYLIC ACID.
                   1
                          1
    MOD RES
FT
                          4
                                  SULFATION.
                   4
    MOD RES
FT
                                  AMIDATION.
                         11
FT
     MOD RES
                  11
                                  10DAB894EDD861BB CRC64;
                11 AA; 1328 MW;
     SEQUENCE
SO
                           9.1%; Score 1; DB 1; Length 11;
  Query Match
                          100.0%; Pred. No. 8.7e+04;
  Best Local Similarity
                                                                  0; Gaps
                                                    0; Indels
           1; Conservative 0; Mismatches
  Matches
            6 G 6
Qy
              Db
            6 G 6
RESULT 36
CA31 LITCI
                                    PRT;
                                            11 AA.
     CA31 LITCI
                    STANDARD;
ID
     P82089;
AC
     16-OCT-2001 (Rel. 40, Created)
DT
     16-OCT-2001 (Rel. 40, Last sequence update)
DT
     10-OCT-2003 (Rel. 42, Last annotation update)
DT
     Caerulein 3.1/3.1Y4.
DE
     Litoria citropa (Australian blue mountains tree frog).
OS
     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC
     Amphibia; Batrachia; Anura; Neobatrachia; Hyloidea; Hylidae;
OC
     Pelodryadinae; Litoria.
OC
     NCBI TaxID=94770;
OX
RN
     [1]
     SEQUENCE, AND MASS SPECTROMETRY.
RP
     TISSUE=Skin secretion;
RC
     MEDLINE=20057701; PubMed=10589099;
RX
     Wabnitz P.A., Bowie J.H., Tyler M.J.;
RA
     "Caerulein-like peptides from the skin glands of the Australian blue
RT
     montains tree frog Litoria citropa. Part 1. Sequence determination
RT
     using electrospray mass spectrometry.";
RT
     Rapid Commun. Mass Spectrom. 13:2498-2502(1999).
RL
     -!- FUNCTION: Hypotensive neuropeptide (Probable).
CC
     -!- SUBCELLULAR LOCATION: Secreted.
CC
     -!- TISSUE SPECIFICITY: Skin dorsal glands.
CC
     -!- PTM: Isoform 3.1Y4 differs from isoform 3.1 in not being
CC
         sulfated.
CC
     -!- MASS SPECTROMETRY: MW=1407; METHOD=Electrospray.
CC
     -!- SIMILARITY: Belongs to the gastrin/cholecystokinin family.
CC
     InterPro; IPR001651; Gastrin.
DR
     PROSITE; PS00259; GASTRIN; FALSE_NEG.
DR
     Amphibian defense peptide; Hypotensive agent; Amidation; Sulfation;
KW
     Pyrrolidone carboxylic acid.
KW
                                   PYRROLIDONE CARBOXYLIC ACID.
     MOD RES
                    1
                           1
FT
     MOD RES
                           4
                                   SULFATION.
                    4
FT
                          11
                                   AMIDATION.
                   11
     MOD RES
FT
```

```
11 AA; 1347 MW;
                                  10DAB7D67861A86B CRC64;
SQ
     SEQUENCE
                                  Score 1; DB 1; Length 11;
                           9.1%;
  Query Match
                          100.0%; Pred. No. 8.7e+04;
  Best Local Similarity
                                                                              0;
                                 0; Mismatches
                                                  0; Indels
                                                                  0; Gaps
            1; Conservative
            6 G 6
Qy
            5 G 5
Db
RESULT 37
CA32 LITCI
     CA32 LITCI
                    STANDARD;
                                   PRT;
                                           11 AA.
ID
     P82090;
AC
     16-OCT-2001 (Rel. 40, Created)
DT
     16-OCT-2001 (Rel. 40, Last sequence update)
DT
     10-OCT-2003 (Rel. 42, Last annotation update)
DT
     Caerulein 3.2/3.2Y4.
DΕ
     Litoria citropa (Australian blue mountains tree frog).
os
     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC
     Amphibia; Batrachia; Anura; Neobatrachia; Hyloidea; Hylidae;
OC
OC
     Pelodryadinae; Litoria.
     NCBI TaxID=94770;
OX
RN
     [1]
     SEQUENCE, AND MASS SPECTROMETRY.
RP
     TISSUE=Skin secretion;
RC
     MEDLINE=20057701; PubMed=10589099;
RX
     Wabnitz P.A., Bowie J.H., Tyler M.J.;
RA
     "Caerulein-like peptides from the skin glands of the Australian blue
RT
     montains tree frog Litoria citropa. Part 1. Sequence determination
RT
     using electrospray mass spectrometry.";
RT
     Rapid Commun. Mass Spectrom. 13:2498-2502(1999).
RL
     -!- FUNCTION: Hypotensive neuropeptide (Probable).
CC
     -!- SUBCELLULAR LOCATION: Secreted.
CC
     -!- TISSUE SPECIFICITY: Skin dorsal glands.
CC
     -!- PTM: Isoform 3.2Y4 differs from isoform 3.2 in not being
CC
CC
         sulfated.
     -!- MASS SPECTROMETRY: MW=1423; METHOD=Electrospray.
CC
     -!- SIMILARITY: Belongs to the gastrin/cholecystokinin family.
CC
     InterPro; IPR001651; Gastrin.
DR
     PROSITE; PS00259; GASTRIN; FALSE_NEG.
DR
     Amphibian defense peptide; Hypotensive agent; Amidation; Sulfation;
KW
     Pyrrolidone carboxylic acid.
KW
                                   PYRROLIDONE CARBOXYLIC ACID.
                           1
     MOD RES
                   1
FT
                                   SULFATION.
FT
     MOD RES
                    4
                           4
                          11
                                   AMIDATION.
FT
     MOD RES
                  11
                                  10DAB8867861A86B CRC64;
     SEQUENCE
                11 AA; 1363 MW;
SQ
                            9.1%; Score 1; DB 1; Length 11;
  Ouery Match
                           100.0%; Pred. No. 8.7e+04;
  Best Local Similarity
                                                                               0;
                                0; Mismatches
                                                   0; Indels
                                                                   0; Gaps
             1; Conservative
  Matches
            6 G 6
Qу
             5 G 5
 Db
```

```
RESULT 38
CA41 LITCI
     CA41 LITCI
                    STANDARD;
                                    PRT;
                                            11 AA.
ID
AC
     P82091;
     16-OCT-2001 (Rel. 40, Created)
DT
     16-OCT-2001 (Rel. 40, Last sequence update)
DT
     10-OCT-2003 (Rel. 42, Last annotation update)
DT
     Caerulein 4.1/4.1Y4.
DE
     Litoria citropa (Australian blue mountains tree frog).
OS
     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC
     Amphibia; Batrachia; Anura; Neobatrachia; Hyloidea; Hylidae;
OC
     Pelodryadinae; Litoria.
OC
     NCBI_TaxID=94770;
OX
RN
     [1]
     SEQUENCE, AND MASS SPECTROMETRY.
RP
     TISSUE=Skin secretion;
RC
     MEDLINE=20057701; PubMed=10589099;
RX
     Wabnitz P.A., Bowie J.H., Tyler M.J.;
RA
     "Caerulein-like peptides from the skin glands of the Australian blue
RT
     montains tree frog Litoria citropa. Part 1. Sequence determination
RT
     using electrospray mass spectrometry.";
RT
     Rapid Commun. Mass Spectrom. 13:2498-2502(1999).
RL
     -!- FUNCTION: Hypotensive neuropeptide (Probable).
CC
     -!- SUBCELLULAR LOCATION: Secreted.
CC
     -!- TISSUE SPECIFICITY: Skin dorsal glands.
CC
     -!- PTM: Isoform 4.1Y4 differs from isoform 4.1 in not being
CC
         sulfated.
CC
     -!- MASS SPECTROMETRY: MW=1388; METHOD=Electrospray.
CC
     -!- SIMILARITY: Belongs to the gastrin/cholecystokinin family.
CC
     InterPro; IPR001651; Gastrin.
DR
     PROSITE; PS00259; GASTRIN; FALSE_NEG.
DR
     Amphibian defense peptide; Hypotensive agent; Amidation; Sulfation;
ΚW
     Pyrrolidone carboxylic acid.
KW
                                   PYRROLIDONE CARBOXYLIC ACID.
                   1
FT
     MOD RES
                           1
                           4
                                   SULFATION.
     MOD RES
                   4
FT
                                   AMIDATION.
     MOD RES
                  11
                          11
FT
                                  10DAB7C4F5B861BB CRC64;
                       1328 MW;
     SEQUENCE
                11 AA;
SO
                            9.1%; Score 1; DB 1; Length 11;
  Query Match
                           100.0%; Pred. No. 8.7e+04;
  Best Local Similarity
                                                                                0;
                Conservative
                                 0; Mismatches
                                                    0;
                                                        Indels
                                                                   0; Gaps
             1;
            6 G 6
Qу
            6 G 6
RESULT 39
CA42 LITCI
                                            11 AA.
                                    PRT;
     CA42 LITCI
                     STANDARD;
ID
     P82092;
AC
     16-OCT-2001 (Rel. 40, Created)
DT
     16-OCT-2001 (Rel. 40, Last sequence update)
DT
     10-OCT-2003 (Rel. 42, Last annotation update)
DT
     Caerulein 4.2/4.2Y4.
DE
     Litoria citropa (Australian blue mountains tree frog).
OS
```

```
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC
     Amphibia; Batrachia; Anura; Neobatrachia; Hyloidea; Hylidae;
OC
     Pelodryadinae; Litoria.
OC
     NCBI TaxID=94770;
OX
RN
     [1]
     SEQUENCE, AND MASS SPECTROMETRY.
RP
     TISSUE=Skin secretion;
RC
     MEDLINE=20057701; PubMed=10589099;
RX
     Wabnitz P.A., Bowie J.H., Tyler M.J.;
RA
     "Caerulein-like peptides from the skin glands of the Australian blue
RT
     montains tree frog Litoria citropa. Part 1. Sequence determination
RT
     using electrospray mass spectrometry.";
RT
     Rapid Commun. Mass Spectrom. 13:2498-2502(1999).
RL
     -!- FUNCTION: Hypotensive neuropeptide (Probable).
CC
     -!- SUBCELLULAR LOCATION: Secreted.
CC
     -!- TISSUE SPECIFICITY: Skin dorsal glands.
CC
     -!- PTM: Isoform 4.2Y4 differs from isoform 4.2 in not being
CC
CC
         sulfated.
     -!- MASS SPECTROMETRY: MW=1404; METHOD=Electrospray.
CC
     -!- SIMILARITY: Belongs to the gastrin/cholecystokinin family.
CC
DR
     InterPro; IPR001651; Gastrin.
     PROSITE; PS00259; GASTRIN; FALSE NEG.
DR
     Amphibian defense peptide; Hypotensive agent; Amidation; Sulfation;
KW
     Pyrrolidone carboxylic acid.
KW
                                   PYRROLIDONE CARBOXYLIC ACID.
FT
     MOD RES
                   1
                           1
     MOD RES
                   4
                           4
                                   SULFATION.
FT
                                   AMIDATION.
     MOD RES
                  11
                         11
FT
                11 AA; 1344 MW;
                                   10DAB894F5B861BB CRC64;
     SEQUENCE
SQ
                                   Score 1; DB 1; Length 11;
  Query Match
                            9.1%;
                           100.0%; Pred. No. 8.7e+04;
  Best Local Similarity
                                                                   0; Gaps
                                                                               0;
                                  0; Mismatches
                                                    0;
                                                        Indels
             1; Conservative
  Matches
            6 G 6
Qу
              1
            6 G 6
Db
RESULT 40
CEP1 ACHFU
                     STANDARD;
                                    PRT;
                                            11 AA.
     CEP1 ACHFU
     P22790;
AC
     01-AUG-1991 (Rel. 19, Created)
DT
     01-AUG-1991 (Rel. 19, Last sequence update)
DT
     01-DEC-1992 (Rel. 24, Last annotation update)
DT
     Cardio-excitatory peptide-1 (ACEP-1).
DE
     Achatina fulica (Giant African snail).
os
     Eukaryota; Metazoa; Mollusca; Gastropoda; Pulmonata; Stylommatophora;
OC
     Sigmurethra; Achatinoidea; Achatinidae; Achatina.
OC
     NCBI TaxID=6530;
OX
RN
     [1]
     SEQUENCE.
RP
     STRAIN=Ferussac; TISSUE=Heart atrium;
RC
     MEDLINE=90211261; PubMed=2322251;
RX
     Fujimoto K., Ohta N., Yoshida M., Kubota I., Muneoka Y., Kobayashi M.;
 RA
     "A novel cardio-excitatory peptide isolated from the atria of the
 RT
     African giant snail, Achatina fulica.";
 RT
```

```
Biochem. Biophys. Res. Commun. 167:777-783(1990).
RL
     -!- FUNCTION: Potentiates the beat of the ventricle, and has also
CC
         excitatory actions on the penis retractor muscle, the buccal
CC
         muscle and the identified neurons controlling the buccal muscle
CC
         movement of achatina.
CC
     -!- SIMILARITY: TO POSSIBLE PEPTIDE L5 FROM APLYSIA.
CC
     PIR; A34662; A34662.
DR
     Hormone; Amidation.
KW
                                  AMIDATION.
     MOD RES
                  11
                         11
FT
                                  82D6D5B9C7741365 CRC64;
     SEQUENCE
                11 AA; 1305 MW;
SO
                                  Score 1; DB 1; Length 11;
                           9.1%;
  Query Match
                          100.0%; Pred. No. 8.7e+04;
  Best Local Similarity
                                                                  0; Gaps
                                                                              0;
                                                   0; Indels
             1; Conservative
                                 0; Mismatches
            3 S 3
Qу
Db
            1 S 1
RESULT 41
COXA CANFA
                                            11 AA.
                                   PRT;
ID
     COXA CANFA
                    STANDARD;
     P99501;
     15-JUL-1998 (Rel. 36, Created)
DT
     15-JUL-1998 (Rel. 36, Last sequence update)
DT
     30-MAY-2000 (Rel. 39, Last annotation update)
DT
     Cytochrome c oxidase polypeptide Va (EC 1.9.3.1) (Fragment).
DΕ
     COX5A.
GN
     Canis familiaris (Dog).
OS
     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC
     Mammalia; Eutheria; Carnivora; Fissipedia; Canidae; Canis.
OC
     NCBI TaxID=9615;
OX
RN
     [1]
     SEQUENCE.
RP
     TISSUE=Heart;
RC
     MEDLINE=98163340; PubMed=9504812;
RX
     Dunn M.J., Corbett J.M., Wheeler C.H.;
RA
     "HSC-2DPAGE and the two-dimensional gel electrophoresis database of
RT
     dog heart proteins.";
RT
     Electrophoresis 18:2795-2802(1997).
RL
     -!- FUNCTION: This is the heme A-containing chain of cytochrome c
CC
         oxidase, the terminal oxidase in mitochondrial electron transport.
CC
     -!- CATALYTIC ACTIVITY: 4 ferrocytochrome c + O(2) = 4 ferricytochrome
CC
         c + 2 H(2)0.
CC
     -!- SUBCELLULAR LOCATION: Mitochondrial inner membrane.
CC
     -!- SIMILARITY: Belongs to the cytochrome c oxidase Va family.
CC
     HSC-2DPAGE; P99501; DOG.
DR
     InterPro; IPR003204; Cyt c ox5A.
DR
     Pfam; PF02284; COX5A; 1.
     Oxidoreductase; Heme; Mitochondrion; Inner membrane.
KW
     NON TER
                         11
                  11
FT
                11 AA; 1274 MW; 910B35C5B1AB11F5 CRC64;
     SEQUENCE
SQ
                            9.1%; Score 1; DB 1; Length 11;
  Query Match
                           100.0%; Pred. No. 8.7e+04;
  Best Local Similarity
                                                                               0;
                                 0; Mismatches
                                                    0;
                                                       Indels
                                                                   0; Gaps
                 Conservative
  Matches
             1;
```

```
3 S 3
Qу
              - 1
            1 S 1
Db
RESULT 42
CSI5 BACSU
                                    PRT:
                                            11 AA.
                    STANDARD;
     CSI5 BACSU
AC
     P81095;
     15-JUL-1998 (Rel. 36, Created)
DT
     15-JUL-1998 (Rel. 36, Last sequence update)
DT
     28-FEB-2003 (Rel. 41, Last annotation update)
DT
     Cold shock protein CSI5 (11 kDa cold shock protein) (Fragment).
DE
     Bacillus subtilis.
OS
     Bacteria; Firmicutes; Bacillales; Bacillaceae; Bacillus.
OC
OX
     NCBI TaxID=1423;
RN
     [1]
RP
     SEQUENCE.
     STRAIN=168 / JH642;
RC
     Graumann P.L., Schmid R., Marahiel M.A.;
RA
     Submitted (OCT-1997) to Swiss-Prot.
RL
RN
     [2]
     CHARACTERIZATION.
RP
     STRAIN=168 / JH642;
RC
     MEDLINE=96345629; PubMed=8755892;
RX
     Graumann P., Schroeder K., Schmid R., Marahiel M.A.;
RA
     "Cold shock stress-induced proteins in Bacillus subtilis.";
RT
     J. Bacteriol. 178:4611-4619(1996).
RL
     -!- SUBCELLULAR LOCATION: Cytoplasmic.
CC
     -!- INDUCTION: In response to low temperature.
CC
     -!- CAUTION: Could not be found in the genome of B. subtilis 168.
CC
     NON TER
                  11
                          11
FT
                11 AA; 1360 MW;
                                  15F6ECEE6322C330 CRC64;
     SEQUENCE
SQ
                            9.1%; Score 1; DB 1; Length 11;
  Query Match
                           100.0%; Pred. No. 8.7e+04;
  Best Local Similarity
                                                   0; Indels
                                                                       Gaps
                                                                               0;
             1; Conservative
                                0; Mismatches
  Matches
            4 R 4
Qу
            2 R 2
Db
RESULT 43
CX5A CONAL
                                    PRT;
                                            11 AA.
                     STANDARD;
     CX5A CONAL
ΙD
     P58848;
AC
     28-FEB-2003 (Rel. 41, Created)
DT
     28-FEB-2003 (Rel. 41, Last sequence update)
DT
     15-MAR-2004 (Rel. 43, Last annotation update)
DT
     Conotoxin au5a.
DE
     Conus aulicus (Court cone).
OS
     Eukaryota; Metazoa; Mollusca; Gastropoda; Orthogastropoda;
OC
     Apogastropoda; Caenogastropoda; Sorbeoconcha; Hypsogastropoda;
OC
     Neogastropoda; Conoidea; Conidae; Conus.
OC
     NCBI TaxID=89437;
OX
```

```
RN
     [1]
     SEQUENCE, SYNTHESIS, AND MASS SPECTROMETRY.
RΡ
RC
     TISSUE=Venom;
     MEDLINE=99452958; PubMed=10521453;
RX
     Walker C.S., Steel D., Jacobsen R.B., Lirazan M.B., Cruz L.J.,
RA
     Hooper D., Shetty R., DelaCruz R.C., Nielsen J.S., Zhou L.M.,
RA
     Bandyopadhyay P., Craig A.G., Olivera B.M.;
RA
     "The T-superfamily of conotoxins.";
RT
     J. Biol. Chem. 274:30664-30671(1999).
RL
RN
     [2]
     ERRATUM.
RP
     Walker C.S., Steel D., Jacobsen R.B., Lirazan M.B., Cruz L.J.,
RA
     Hooper D., Shetty R., DelaCruz R.C., Nielsen J.S., Zhou L.M.,
RA
     Bandyopadhyay P., Craig A.G., Olivera B.M.;
RA
     J. Biol. Chem. 274:36030-36030(1999).
RL
     -!- FUNCTION: Causes dorsal fins drooping in fish. No effect is
CC
         observed when injected into mice.
CC
     -!- SUBCELLULAR LOCATION: Secreted.
CC
     -!- TISSUE SPECIFICITY: Expressed by the venom duct.
CC
     -!- MASS SPECTROMETRY: MW=1436.6; METHOD=LSIMS.
CC
     -!- SIMILARITY: Belongs to the conotoxin T-superfamily.
CC
     PIR; A59146; A59146.
DR
KW
     Toxin.
FT
     DISULFID
                   2
                         10
     DISULFID
                   3
FT
                                   21A36775440059D7 CRC64;
                        1441 MW;
SQ
     SEQUENCE
                11 AA;
  Query Match
                            9.1%; Score 1; DB 1;
                                                    Length 11;
                          100.0%; Pred. No. 8.7e+04;
  Best Local Similarity
                                  0; Mismatches
                                                     0;
                                                         Indels
                                                                   0;
                                                                       Gaps
             1; Conservative
  Matches
            4 R 4
Qу
              ı
            7 R 7
Db
RESULT 44
CX5B CONAL
     CX5B CONAL
                                    PRT;
                                            11 AA.
ID
                    STANDARD;
     P58849;
AC
     28-FEB-2003 (Rel. 41, Created)
DT
     28-FEB-2003 (Rel. 41, Last sequence update)
DT
     15-MAR-2004 (Rel. 43, Last annotation update)
DT
     Conotoxin au5b.
DE
     Conus aulicus (Court cone).
OS
     Eukaryota; Metazoa; Mollusca; Gastropoda; Orthogastropoda;
OC
     Apogastropoda; Caenogastropoda; Sorbeoconcha; Hypsogastropoda;
OC
     Neogastropoda; Conoidea; Conidae; Conus.
OC
OX
     NCBI TaxID=89437;
RN
     [1]
     SEQUENCE, AND MASS SPECTROMETRY.
RP
RC
     TISSUE=Venom;
     MEDLINE=99452958; PubMed=10521453;
RX
     Walker C.S., Steel D., Jacobsen R.B., Lirazan M.B., Cruz L.J.,
RA
     Hooper D., Shetty R., DelaCruz R.C., Nielsen J.S., Zhou L.M.,
RA
     Bandyopadhyay P., Craig A.G., Olivera B.M.;
RA
     "The T-superfamily of conotoxins.";
RT
```

```
J. Biol. Chem. 274:30664-30671(1999).
RL
RN
     ERRATUM.
RP
     Walker C.S., Steel D., Jacobsen R.B., Lirazan M.B., Cruz L.J.,
RA
     Hooper D., Shetty R., DelaCruz R.C., Nielsen J.S., Zhou L.M.,
RA
     Bandyopadhyay P., Craig A.G., Olivera B.M.;
RA
     J. Biol. Chem. 274:36030-36030(1999).
RL
     -!- FUNCTION: Causes dorsal fins drooping in fish. No effect is
CC
         observed when injected into mice (By similarity).
CC
     -!- SUBCELLULAR LOCATION: Secreted.
CC
     -!- TISSUE SPECIFICITY: Expressed by the venom duct.
CC
     -!- MASS SPECTROMETRY: MW=1388.6; METHOD=LSIMS.
CC
     -!- SIMILARITY: Belongs to the conotoxin T-superfamily.
CC
DR
     PIR; B59146; B59146.
     Toxin.
KW
                          9
     DISULFID
                   2
FT
     DISULFID
                   3
                         10
FT
                11 AA; 1393 MW; 21A36775440042D7 CRC64;
SO
     SEQUENCE
                           9.1%; Score 1; DB 1; Length 11;
  Query Match
                          100.0%; Pred. No. 8.7e+04;
  Best Local Similarity
                                                    0; Indels
                                                                      Gaps
                                                                               0;
                                0; Mismatches
             1; Conservative
            4 R 4
Qу
            7 R 7
Db
RESULT 45
CXL1 CONMR
                                    PRT;
                                            11 AA.
     CXL1 CONMR
                    STANDARD;
ID
     P58807;
AC
     28-FEB-2003 (Rel. 41, Created)
DT
     28-FEB-2003 (Rel. 41, Last sequence update)
DT
     28-FEB-2003 (Rel. 41, Last annotation update)
DT
     Lambda-conotoxin CMrVIA.
DE
     Conus marmoreus (Marble cone).
OS
     Eukaryota; Metazoa; Mollusca; Gastropoda; Orthogastropoda;
OC
     Apogastropoda; Caenogastropoda; Sorbeoconcha; Hypsogastropoda;
OC
     Neogastropoda; Conoidea; Conidae; Conus.
OC
     NCBI TaxID=42752;
OX
RN
     SEQUENCE, SYNTHESIS, AND MASS SPECTROMETRY.
RP
     TISSUE=Venom;
RC
     MEDLINE=20564325; PubMed=10988292;
RX
     Balaji R.A., Ohtake A., Sato K., Gopalakrishnakone P., Kini R.M.,
RA
     Seow K.T., Bay B.-H.;
RA
     "Lambda-conotoxins, a new family of conotoxins with unique disulfide
RT
     pattern and protein folding. Isolation and characterization from the
RT
     venom of Conus marmoreus.";
     J. Biol. Chem. 275:39516-39522(2000).
RL
     -!- FUNCTION: Inhibits the neuronal noradrenaline transporter.
CC
     -!- SUBCELLULAR LOCATION: Secreted.
CC
     -!- TISSUE SPECIFICITY: Expressed by the venom duct.
CC
     -!- MASS SPECTROMETRY: MW=1237.93; MW_ERR=0.21; METHOD=Electrospray.
CC
     -!- SIMILARITY: Belongs to the chi/lambda-conotoxin family.
CC
     Neurotoxin; Toxin; Hydroxylation.
```

```
11
                   2
FT
    DISULFID
                   3
                          8
FT
    DISULFID
                                  HYDROXYLATION.
                         10
    MOD RES
                  10
FT
                                  277AAC60B7232B58 CRC64;
    SEQUENCE
                11 AA;
                        1226 MW;
SQ
                                  Score 1; DB 1; Length 11;
                           9.1%;
 Query Match
                          100.0%; Pred. No. 8.7e+04;
  Best Local Similarity
                                                    0; Indels
                                                                  0; Gaps
                                                                               0;
             1; Conservative
                                0; Mismatches
 Matches
            6 G 6
Qу
            4 G 4
Db
RESULT 46
EFG CLOPA
                                            11 AA.
                                    PRT;
                    STANDARD;
     EFG CLOPA
ΙD
AC
     P81350;
     15-JUL-1998 (Rel. 36, Created)
DT
     15-JUL-1998 (Rel. 36, Last sequence update)
DT
     28-FEB-2003 (Rel. 41, Last annotation update)
DΤ
     Elongation factor G (EF-G) (CP 5) (Fragment).
DE
GN
     FUSA.
     Clostridium pasteurianum.
OS
     Bacteria; Firmicutes; Clostridia; Clostridiales; Clostridiaceae;
OC
     Clostridium.
OC
     NCBI TaxID=1501;
OX
RN
     [1]
     SEQUENCE.
RP
RC
     STRAIN=W5;
     MEDLINE=98291870; PubMed=9629918;
RX
     Flengsrud R., Skjeldal L.;
RA
     "Two-dimensional gel electrophoresis separation and N-terminal
RT
     sequence analysis of proteins from Clostridium pasteurianum W5.";
RT
     Electrophoresis 19:802-806(1998).
RL
     -!- FUNCTION: This protein promotes the GTP-dependent translocation of
CC
         the nascent protein chain from the A-site to the P-site of the
CC
CC
         ribosome.
     -!- SUBCELLULAR LOCATION: Cytoplasmic.
CC
     -!- SIMILARITY: Belongs to the GTP-binding elongation factor family.
CC
         EF-G/EF-2 subfamily.
CC
     InterPro; IPR000795; EF GTPbind.
DR
     PROSITE; PS00301; EFACTOR GTP; PARTIAL.
DR
     Elongation factor; Protein biosynthesis; GTP-binding.
KW
                          11
                   11
FT
     NON TER
     SEQUENCE
                11 AA; 1337 MW;
                                   412E71F1D9C33B17 CRC64;
SO
                            9.1%; Score 1; DB 1; Length 11;
  Query Match
                           100.0%; Pred. No. 8.7e+04;
  Best Local Similarity
                                                                                0:
                                                                   0; Gaps
                                  0; Mismatches
                                                     0;
                                                        Indels
             1; Conservative
             2 K 2
Qу
             1 K 1
```

```
ES1 RAT
                                    PRT;
                                            11 AA.
                    STANDARD;
ID
     ES1 RAT
AC
     P56571;
     15-DEC-1998 (Rel. 37, Created)
DT
     15-DEC-1998 (Rel. 37, Last sequence update)
DT
     15-MAR-2004 (Rel. 43, Last annotation update)
DT
     ES1 protein, mitochondrial (Fragment).
DE
     Rattus norvegicus (Rat).
OS
     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC
     Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.
OC
     NCBI TaxID=10116;
OX
RN
     [1]
RP
     SEQUENCE.
RC
     STRAIN=Wistar; TISSUE=Heart;
     Li X.-P., Pleissner K.-P., Scheler C., Regitz-Zagrosek V., Salikov J.,
RA
     Jungblut P.R.;
RA
     Submitted (SEP-1998) to Swiss-Prot.
RL
     -!- SUBCELLULAR LOCATION: Mitochondrial (Potential).
CC
     -!- MISCELLANEOUS: By 2D-PAGE, the determined pI of this protein (spot
CC
         P2) is: 8.9, its MW is: 25 kDa.
CC
     -!- SIMILARITY: BELONGS TO THE ES1 FAMILY.
CC
KW
     Mitochondrion.
FT
     NON TER
                  11
                         11
                                   D862272D32C72DC2 CRC64;
     SEQUENCE
                11 AA;
                        1142 MW;
SQ
                            9.1%; Score 1; DB 1; Length 11;
  Query Match
                          100.0%; Pred. No. 8.7e+04;
  Best Local Similarity
                                                       Indels
                                                                   0;
                                                                       Gaps
                                                                               0;
                                 0; Mismatches 0;
             1; Conservative
  Matches
            4 R 4
Qу
            1 R 1
Db
RESULT 48
FAR6 PENMO
                                    PRT;
                                            11 AA.
     FAR6 PENMO
                    STANDARD;
ID
AC
     P83321;
     28-FEB-2003 (Rel. 41, Created)
DT
     28-FEB-2003 (Rel. 41, Last sequence update)
DT
     28-FEB-2003 (Rel. 41, Last annotation update)
DT
     FMRFamide-like neuropeptide FLP6 (DGRTPALRLRF-amide).
DE
     Penaeus monodon (Penoeid shrimp).
OS
     Eukaryota; Metazoa; Arthropoda; Crustacea; Malacostraca;
OC
     Eumalacostraca; Eucarida; Decapoda; Dendrobranchiata; Penaeoidea;
OC
     Penaeidae; Penaeus.
OC
     NCBI TaxID=6687;
OX
 RN
      [1]
      SEQUENCE, AND MASS SPECTROMETRY.
 RP
      TISSUE=Eyestalk;
 RC
     MEDLINE=21956277; PubMed=11959015;
 RX
      Sithigorngul P., Pupuem J., Krungkasem C., Longyant S.,
 RA
      Chaivisuthangkura P., Sithigorngul W., Petsom A.;
 RA
      "Seven novel FMRFamide-like neuropeptide sequences from the eyestalk
 RT
      of the giant tiger prawn Penaeus monodon.";
 RT
      Comp. Biochem. Physiol. 131B:325-337(2002).
 RL
      -!- SUBCELLULAR LOCATION: Secreted.
 CC
```

```
-!- MASS SPECTROMETRY: MW=1301.8; METHOD=MALDI.
CC
     -!- SIMILARITY: Belongs to the FARP (FMRFamide related peptide)
CC
CC
         family.
     GO; GO:0007218; P:neuropeptide signaling pathway; TAS.
DR
     Neuropeptide; Amidation.
KW
                                  AMIDATION.
     MOD RES
                  11
                         11
FT
                        1301 MW; 9A19C860072DC771 CRC64;
     SEQUENCE
                11 AA;
SQ
                           9.1%; Score 1; DB 1; Length 11;
  Query Match
                          100.0%; Pred. No. 8.7e+04;
  Best Local Similarity
                                                       Indels
                                                                  0; Gaps
                                                                               0;
                                 0; Mismatches
                                                    0;
             1; Conservative
            6 G 6
Qy
            2 G 2
Db
RESULT 49
FAR9 CALVO
                                            11 AA.
                    STANDARD;
                                    PRT;
     FAR9 CALVO
ΤD
AC
     P41864;
     01-NOV-1995 (Rel. 32, Created)
DT
     01-NOV-1995 (Rel. 32, Last sequence update)
DT
     01-NOV-1995 (Rel. 32, Last annotation update)
DT
     CalliFMRFamide 9.
DE
     Calliphora vomitoria (Blue blowfly).
OS
     Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;
OC
     Neoptera; Endopterygota; Diptera; Brachycera; Muscomorpha; Oestroidea;
OC
     Calliphoridae; Calliphora.
OC
     NCBI TaxID=27454;
OX
RN
     [1]
RP
     SEQUENCE.
     TISSUE=Thoracic ganglion;
RC
     MEDLINE=92196111; PubMed=1549595;
RX
     Duve H., Johnsen A.H., Sewell J.C., Scott A.G., Orchard I.,
RA
     Rehfeld J.F., Thorpe A.;
RA
     "Isolation, structure, and activity of -Phe-Met-Arg-Phe-NH2
RT
     neuropeptides (designated calliFMRFamides) from the blowfly
RT
     Calliphora vomitoria.";
RT
     Proc. Natl. Acad. Sci. U.S.A. 89:2326-2330(1992).
RL
     -!- SIMILARITY: Belongs to the FARP (FMRFamide related peptide)
CC
         family.
CC
     PIR; I41978; I41978.
DR
     Neuropeptide; Amidation.
KW
                                   AMIDATION.
     MOD RES
                  11
                          11
FT
                11 AA; 1359 MW;
                                  8160CE46CAA44321 CRC64;
     SEQUENCE
SQ
                            9.1%; Score 1; DB 1; Length 11;
  Query Match
                          100.0%; Pred. No. 8.7e+04;
  Best Local Similarity
                                                                               0;
                                0; Mismatches
                                                                   0;
                                                                       Gaps
             1; Conservative
                                                    0;
                                                        Indels
  Matches
             3 S 3
Qу
               ł
             1 S 1
 Db
```

```
LADD ONCMY
     LADD ONCMY
                    STANDARD;
                                    PRT:
ID
                                            11 AA.
AC
     P81018;
     01-NOV-1997 (Rel. 35, Created)
DT
     01-NOV-1997 (Rel. 35, Last sequence update)
DΤ
DT
     15-DEC-1998 (Rel. 37, Last annotation update)
DΕ
     Ladderlectin (Fragment).
     Oncorhynchus mykiss (Rainbow trout) (Salmo qairdneri).
OS
OC
     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
     Actinopterygii; Neopterygii; Teleostei; Euteleostei;
OC
OC
     Protacanthopterygii; Salmoniformes; Salmonidae; Oncorhynchus.
     NCBI TaxID=8022;
OX
RN
     [1]
RP
     SEQUENCE.
     TISSUE=Blood;
RC
RX
     MEDLINE=97293418; PubMed=9149391;
RA
     Jensen L.E., Thiel S., Petersen T.E., Jensenuis J.C.;
RT
     "A rainbow trout lectin with multimeric structure.";
RL
     Comp. Biochem. Physiol. 116B:385-390(1997).
     -!- FUNCTION: Lectin that binds sepharose.
CC
     -!- COFACTOR: Calcium is essential for sepharose binding.
CC
CC
     -!- SUBUNIT: Multimeric.
     Lectin; Calcium.
KW
FT
     NON TER
                  11
                         11
                11 AA; 1163 MW;
                                  0B26227FF6D45404 CRC64;
SQ
     SEQUENCE
  Query Match
                           9.1%; Score 1; DB 1; Length 11;
  Best Local Similarity
                          100.0%; Pred. No. 8.7e+04;
  Matches
            1; Conservative
                                0; Mismatches
                                                   0; Indels
                                                                  0; Gaps
                                                                               0;
            1 A 1
Qу
            1 A 1
RESULT 51
LPW THETH
     LPW THETH
                    STANDARD;
                                   PRT;
AC
     P05624;
DT
     01-NOV-1988 (Rel. 09, Created)
     01-NOV-1988 (Rel. 09, Last sequence update)
DT
     30-MAY-2000 (Rel. 39, Last annotation update)
DT
     Trp operon leader peptide.
DE
GN
     TRPL.
OS
     Thermus thermophilus.
OC
     Bacteria; Deinococcus-Thermus; Deinococci; Thermales; Thermaceae;
OC
     Thermus.
OX
     NCBI TaxID=274;
RN
     [1]
     SEQUENCE FROM N.A.
RP
RC
     STRAIN=HB8 / ATCC 27634;
     MEDLINE=89000781; PubMed=2844259;
RX
     Sato S., Nakada Y., Kanaya S., Tanaka T.;
RA
     "Molecular cloning and nucleotide sequence of Thermus thermophilus
RT
RT
     HB8 trpE and trpG.";
     Biochim. Biophys. Acta 950:303-312(1988).
RL
     -!- FUNCTION: THIS PROTEIN IS INVOLVED IN CONTROL OF THE BIOSYNTHESIS
CC
```

```
CC
        OF TRYPTOPHAN.
     ______
CC
    This SWISS-PROT entry is copyright. It is produced through a collaboration
CC
    between the Swiss Institute of Bioinformatics and the EMBL outstation -
CC
    the European Bioinformatics Institute. There are no restrictions on its
CC
    use by non-profit institutions as long as its content is in no way
CC
    modified and this statement is not removed. Usage by and for commercial
CC
    entities requires a license agreement (See http://www.isb-sib.ch/announce/
CC
    or send an email to license@isb-sib.ch).
CC
CC
    EMBL; X07744; CAA30565.1; -.
DR
     Tryptophan biosynthesis; Leader peptide.
KW
     SEQUENCE 11 AA; 1228 MW; 364B295A772DC5A7 CRC64;
SQ
                          9.1%; Score 1; DB 1; Length 11;
  Query Match
  Best Local Similarity 100.0%; Pred. No. 8.7e+04;
           1; Conservative 0; Mismatches 0; Indels
          11 M 11
Qу
             1
Db
           1 M 1
RESULT 52
LSK1 LEUMA
                                 PRT;
                   STANDARD;
                                         11 AA.
     LSK1 LEUMA
ID
     P04428;
АC
     13-AUG-1987 (Rel. 05, Created)
DT
     13-AUG-1987 (Rel. 05, Last sequence update)
DT
     15-MAR-2004 (Rel. 43, Last annotation update)
DT
     Leucosulfakinin-I (LSK-I).
DE
     Leucophaea maderae (Madeira cockroach).
os
     Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;
OC
     Neoptera; Orthopteroidea; Dictyoptera; Blattaria; Blaberoidea;
OC
     Blaberidae; Leucophaea.
OC
     NCBI TaxID=6988;
OX
RN
     [1]
     SEQUENCE.
RP
     MEDLINE=86315858; PubMed=3749893;
RX
     Nachman R.J., Holman G.M., Haddon W.F., Ling N.;
RA
     "Leucosulfakinin, a sulfated insect neuropeptide with homology to
RT
     gastrin and cholecystokinin.";
RT
     Science 234:71-73(1986).
RL
     -!- FUNCTION: Change the frequency and amplitude of contractions of
CC
         the hingut. Inhibits muscle contraction of hindgut.
CC
     -!- SIMILARITY: Belongs to the gastrin/cholecystokinin family.
CC
     PIR; A01622; GMROL.
DR
     InterPro; IPRO01651; Gastrin.
DR
     PROSITE; PS00259; GASTRIN; 1.
     Hormone; Amidation; Sulfation.
ΚŴ
     MOD RES
                  6
                         6
                                SULFATION.
FT
     MOD RES
                        11
                                 AMIDATION.
                 11
FT
     SEQUENCE 11 AA; 1459 MW; 7E4E0680E86B5AAB CRC64;
SQ
                          9.1%; Score 1; DB 1; Length 11;
  Query Match
                         100.0%; Pred. No. 8.7e+04;
  Best Local Similarity
           1; Conservative 0; Mismatches 0; Indels 0; Gaps
```

```
4 R 4
Qу
           10 R 10
Db
RESULT 53
LSKP PERAM
                                            11 AA.
                                    PRT;
     LSKP PERAM
                    STANDARD;
ΙD
     P36885;
AC
     01-JUN-1994 (Rel. 29, Created)
DΤ
     01-JUN-1994 (Rel. 29, Last sequence update)
DT
     01-FEB-1996 (Rel. 33, Last annotation update)
DT
     Perisulfakinin (Pea-SK-I).
DΕ
     Periplaneta americana (American cockroach).
OS
     Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;
OC
     Neoptera; Orthopteroidea; Dictyoptera; Blattaria; Blattoidea;
OC
OC
     Blattidae; Periplaneta.
OX
     NCBI TaxID=6978;
RN
     [1]
RP
     SEQUENCE.
RC
     TISSUE=Corpora cardiaca;
     MEDLINE=90137190; PubMed=2615921;
RX
RA
     Veenstra J.A.;
     "Isolation and structure of two gastrin/CCK-like neuropeptides from
RT
     the American cockroach homologous to the leucosulfakinins.";
RT
     Neuropeptides 14:145-149(1989).
RL
     -!- FUNCTION: Stimulates hindgut contractions.
CC
     -!- SIMILARITY: Belongs to the gastrin/cholecystokinin family.
CC
     PIR; A60656; A60656.
DR
     InterPro; IPR001651; Gastrin.
DR
     PROSITE; PS00259; GASTRIN; 1.
DR
     Hormone; Amidation; Sulfation.
KW
                                   SULFATION.
     MOD RES
                    6
                           6
FT
                                   AMIDATION.
     MOD RES
                   11
                          11
FT
                                   8B4E0680E86B5AAA CRC64;
                11 AA; 1445 MW;
     SEQUENCE
SQ
                            9.1%; Score 1; DB 1; Length 11;
  Query Match
                           100.0%; Pred. No. 8.7e+04;
  Best Local Similarity
                                                        Indels
                                                     0;
                                                                    0:
                                                                        Gaps
                 Conservative
                                  0; Mismatches
  Matches
              1;
             4 R 4
Qy
            10 R 10
Db
RESULT 54
MHBI KLEPN
                                             11 AA.
                                     PRT:
     MHBI KLEPN
                     STANDARD;
      P80580;
AC
      01-OCT-1996 (Rel. 34, Created)
DT
      01-OCT-1996 (Rel. 34, Last sequence update)
DT
      01-NOV-1997 (Rel. 35, Last annotation update)
      Maleylpyruvate isomerase (EC 5.2.1.4) (Fragment).
DE
      MHBI.
GN
      Klebsiella pneumoniae.
OS
      Bacteria; Proteobacteria; Gammaproteobacteria; Enterobacteriales;
```

OC

```
OC
     Enterobacteriaceae; Klebsiella.
OX
     NCBI TaxID=573;
RN
     [1]
     SEQUENCE.
RP
     MEDLINE=96349117; PubMed=8760924;
RX
     Robson N.D., Parrott S., Cooper R.A.;
RA
     "In vitro formation of a catabolic plasmid carrying Klebsiella
RT
     pneumoniae DNA that allows growth of Escherichia coli K-12 on 3-
RT
     hydroxybenzoate.";
RT
     Microbiology 142:2115-2120(1996).
RL
     -!- CATALYTIC ACTIVITY: 3-maleylpyruvate = 3-fumarylpyruvate.
CC
KW
     Isomerase.
FT
     NON TER
                  11
                         11
                                   1EE0E2DD49C9D5AB CRC64;
     SEOUENCE
                11 AA;
                        1387 MW;
SQ
                            9.1%; Score 1; DB 1; Length 11;
  Query Match
                          100.0%; Pred. No. 8.7e+04;
  Best Local Similarity
                                                                   0; Gaps
                                                                               0;
                                  0; Mismatches
                                                       Indels
             1; Conservative
                                                    0;
           11 M 11
Qу
Db
            1 M 1
RESULT 55
MLG THETS
                                    PRT;
                                            11 AA.
     MLG THETS
                     STANDARD;
ID
AC
     P41989;
     01-NOV-1995 (Rel. 32, Created)
DT
     01-NOV-1995 (Rel. 32, Last sequence update)
DT
     16-OCT-2001 (Rel. 40, Last annotation update)
DT
     Melanotropin gamma (Gamma-melanocyte stimulating hormone) (Gamma-MSH).
DE
     Theromyzon tessulatum (Leech).
OS
     Eukaryota; Metazoa; Annelida; Clitellata; Hirudinida; Hirudinea;
OC
     Rhynchobdellida; Glossiphoniidae; Theromyzon.
OC
     NCBI TaxID=13286;
OX
RN
     [1]
RP
     SEQUENCE.
RC
     TISSUE=Brain;
     MEDLINE=94298944; PubMed=8026574;
RX
     Salzet M., Wattez C., Bulet P., Malecha J.;
RA
     "Isolation and structural characterization of a novel peptide related
RT
     to gamma-melanocyte stimulating hormone from the brain of the leech
RT
     Theromyzon tessulatum.";
RT
     FEBS Lett. 348:102-106(1994).
RL
     -!- SIMILARITY: Belongs to the POMC family.
CC
     PIR; S45698; S45698.
DR
     Hormone; Amidation.
KW
                                   AMIDATION.
                   11
                          11
FT
     MOD RES
                                   2DB8FACE6409C1E8 CRC64;
                 11 AA; 1486 MW;
      SEQUENCE
 SQ
                            9.1%;
                                   Score 1; DB 1; Length 11;
  Query Match
   Best Local Similarity
                           100.0%; Pred. No. 8.7e+04;
                                                                                0;
                                                        Indels
                                                                 0;
                                 0; Mismatches
                                                     0;
              1; Conservative.
  Matches
             6 G 6
Qу
```

```
RESULT 56
MORN HUMAN
                                    PRT;
                                            11 AA.
                    STANDARD;
ID
     MORN HUMAN
AC
     P01163;
     21-JUL-1986 (Rel. 01, Created)
DT
     21-JUL-1986 (Rel. 01, Last sequence update)
DT
     28-FEB-2003 (Rel. 41, Last annotation update)
DT
     Morphogenetic neuropeptide (Head activator) (HA).
DE
     Homo sapiens (Human),
OS
OS
     Rattus norvegicus (Rat),
os
     Bos taurus (Bovine),
     Anthopleura elegantissima (Sea anemone), and
OS
     Hydra attenuata (Hydra) (Hydra vulgaris).
OS
     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC
     Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OC
     NCBI TaxID=9606, 10116, 9913, 6110, 6087;
OX
RN
     [1]
RP
     SEQUENCE.
     SPECIES=Human, Rat, and Bovine;
RC
     MEDLINE=82035850; PubMed=7290191;
RX
     Bodenmuller H., Schaller H.C.;
RA
     "Conserved amino acid sequence of a neuropeptide, the head activator,
RT
     from coelenterates to humans.";
RT
     Nature 293:579-580(1981).
RL
RN
     [2]
RP
     SEQUENCE.
     SPECIES=A.elegantissima, and H.attenuata;
RC
     Schaller H.C., Bodenmuller H.;
RA
     "Isolation and amino acid sequence of a morphogenetic peptide from
RT
     hydra.";
RT
     Proc. Natl. Acad. Sci. U.S.A. 78:7000-7004(1981).
RL
RN
     [3]
     SYNTHESIS.
RΡ
     MEDLINE=82050803; PubMed=7297679;
RX
     Birr C., Zachmann B., Bodenmuller H., Schaller H.C.;
RA
     "Synthesis of a new neuropeptide, the head activator from hydra.";
RT
     FEBS Lett. 131:317-321(1981).
RL
RN
      [4]
     FUNCTION.
RP
     MEDLINE=90059923; PubMed=2583101;
RX
     Schaller H.C., Druffel-Augustin S., Dubel S.;
RA
      "Head activator acts as an autocrine growth factor for NH15-CA2 cells
RT
      in the G2/mitosis transition.";
RT
      EMBO J. 8:3311-3318(1989).
RL
      -!- FUNCTION: HA acts as an autocrine growth factor for neural cells
CC
          in the G2/mitosis transition.
CC
      -!- CAUTION: This peptide was first isolated from nerve cells of hydra
 CC
          and was called head activator by the authors, because it induced
 CC
          head-specific growth and differentiation in this animal. It has
 CC
          been found in mammalian intestine and hypothalamus.
 CC
      PIR; A01427; YHRT.
 DR
      PIR; A93900; YHXAE.
 DR
      PIR; B01427; YHHU.
 DR
      PIR; B93900; YHJFHY.
 DR
```

```
DR
     PIR; C01427; YHBO.
DR
     GK; P01163; -.
     Growth factor; Cell cycle; Mitosis; Pyrrolidone carboxylic acid.
KW
                                  PYRROLIDONE CARBOXYLIC ACID.
FT
     MOD RES
                  1
                         1
                11 AA; 1142 MW; 37927417C325B878 CRC64;
SQ
     SEQUENCE
                           9.1%; Score 1; DB 1; Length 11;
  Query Match
                          100.0%; Pred. No. 8.7e+04;
  Best Local Similarity
                                                                              0;
           1; Conservative 0; Mismatches 0; Indels
                                                                 0; Gaps
            6 G 6
QΫ
Db
            4 G 4
RESULT 57
NUHM CANFA
                                   PRT;
                                           11 AA.
ID
     NUHM CANFA
                    STANDARD;
AC
     P49820;
DT
     01-OCT-1996 (Rel. 34, Created)
     15-JUL-1998 (Rel. 36, Last sequence update)
DΤ
     10-OCT-2003 (Rel. 42, Last annotation update)
DT
     NADH-ubiquinone oxidoreductase 24 kDa subunit (EC 1.6.5.3)
DE
     (EC 1.6.99.3) (Fragment).
DΕ
GN
     NDUFV2.
     Canis familiaris (Dog).
OS
     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC
     Mammalia; Eutheria; Carnivora; Fissipedia; Canidae; Canis.
OC
     NCBI_TaxID=9615;
OX
RN
     [1]
RP
     SEQUENCE.
RC
     TISSUE=Heart;
     MEDLINE=98163340; PubMed=9504812;
RX
     Dunn M.J., Corbett J.M., Wheeler C.H.;
RA
     "HSC-2DPAGE and the two-dimensional gel electrophoresis database of
RT
     dog heart proteins.";
RT
     Electrophoresis 18:2795-2802(1997).
RL
     -!- FUNCTION: TRANSFER OF ELECTRONS FROM NADH TO THE RESPIRATORY
CC
         CHAIN. THE IMMEDIATE ELECTRON ACCEPTOR FOR THE ENZYME IS BELIEVED
CC
         TO BE UBIQUINONE. COMPONENT OF THE FLAVOPROTEIN-SULFUR (FP)
CC
         FRAGMENT OF THE ENZYME.
CC
     -!- CATALYTIC ACTIVITY: NADH + ubiquinone = NAD(+) + ubiquinol.
CC
     -!- CATALYTIC ACTIVITY: NADH + acceptor = NAD(+) + reduced acceptor.
CC
     -!- COFACTOR: Binds 1 2Fe-2S cluster (Potential).
CC
     -!- SUBUNIT: Mammalian complex I is composed of 45 different subunits.
CC
     -!- SUBCELLULAR LOCATION: Matrix and cytoplasmic side of the
CC
         mitochondrial inner membrane.
CC
     -!- SIMILARITY: Belongs to the complex I 24 kDa subunit family.
CC
     HSC-2DPAGE; P49820; DOG.
DR
     InterPro; IPR002023; Cmplx1 24kDa.
     PROSITE; PS01099; COMPLEX1 24K; PARTIAL.
DR
     Oxidoreductase; NAD; Ubiquinone; Mitochondrion; Metal-binding;
KW
     Iron-sulfur; Iron; 2Fe-2S.
KW
FT
     NON TER
                  11
                         11
               11 AA; 1099 MW; 267F5369C9C72DD8 CRC64;
SQ
     SEQUENCE
                           9.1%; Score 1; DB 1; Length 11;
  Query Match
```

```
100.0%; Pred. No. 8.7e+04;
 Best Local Similarity
                                                                              0;
                              0; Mismatches
                                                                  0; Gaps
                                                    0; Indels
            1; Conservative
            6 G 6
Qy
              1
            1 G 1
Db
RESULT 58
PKC1 CARMO
                                   PRT;
                                            11 AA.
     PKC1 CARMO
                    STANDARD;
ΙD
AC
     P82684;
     16-OCT-2001 (Rel. 40, Created)
DT
     16-OCT-2001 (Rel. 40, Last sequence update)
DT
     16-OCT-2001 (Rel. 40, Last annotation update)
DT
     Pyrokinin-1 (Cam-PK-1) (FXPRL-Amide).
DE
     Carausius morosus (Indian stick insect).
OS
     Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;
OC
     Neoptera; Orthopteroidea; Phasmatodea; Euphasmida; Phasmatoidea;
OC
OC
     Heteronemiidae; Carausius.
OX
     NCBI TaxID=7022;
RN
     [1]
     SEQUENCE, FUNCTION, AND MASS SPECTROMETRY.
RP
     TISSUE=Corpora cardiaca;
RC
     Predel R., Kellner R., Gaede G.;
RA
     "Myotropic neuropeptides from the retrocerebral complex of the stick
RT
     insect, Carausius morosus (Phasmatodea: Lonchodidae).";
RT
     Eur. J. Entomol. 96:275-278(1999).
RL
     -!- FUNCTION: Mediates visceral muscle contractile activity (myotropic
CC
CC
         activity).
     -!- MASS SPECTROMETRY: MW=1235; METHOD=MALDI.
CC
     -!- SIMILARITY: Belongs to the pyrokinin family.
CC
     InterPro; IPR001484; Pyrokinin.
DR
     PROSITE; PS00539; PYROKININ; FALSE NEG.
DR
     Neuropeptide; Amidation; Pyrokinin.
KW
                                   AMIDATION.
     MOD RES
                  11
                         11
FT
                                  2BFA5225BB46C1A8 CRC64;
                        1236 MW;
     SEQUENCE
                11 AA;
SQ
                            9.1%; Score 1; DB 1; Length 11;
  Query Match
                          100.0%; Pred. No. 8.7e+04;
  Best Local Similarity
                                                                               0;
                                                        Indels
                                                                   0;
                                                                       Gaps
                Conservative
                                0; Mismatches
  Matches
             1;
            4 R 4
Qу
           10 R 10
Db
RESULT 59
PQQC PSEFL
                                            11 AA.
                                    PRT;
     PQQC PSEFL
                     STANDARD;
     P55173;
AC
     01-OCT-1996 (Rel. 34, Created)
DT
     01-OCT-1996 (Rel. 34, Last sequence update)
DT
     10-OCT-2003 (Rel. 42, Last annotation update)
DT
     Coenzyme PQQ synthesis protein C (Pyrroloquinoline quinone
DΕ
     biosynthesis protein C) (Fragment).
DE
GN
     PQQC.
```

```
Pseudomonas fluorescens.
OS
    Bacteria; Proteobacteria; Gammaproteobacteria; Pseudomonadales;
OC
    Pseudomonadaceae; Pseudomonas.
OC
OX
    NCBI TaxID=294;
RN
    [1]
RP
    SEQUENCE FROM N.A.
    STRAIN=CHA0;
RC
    MEDLINE=96064397; -PubMed=8526497;
RX
    Schnider U., Keel C., Defago G., Haas D.;
RA
     "Tn5-directed cloning of pqq genes from Pseudomonas fluorescens CHA0:
RT
    mutational inactivation of the genes results in overproduction of the
RT
    antibiotic pyoluteorin.";
RT
    Appl. Environ. Microbiol. 61:3856-3864(1995).
RL
    -!- PATHWAY: Pyrroloquinoline quinone (PQQ) biosynthesis.
CC
     -!- SIMILARITY: Belongs to the pqqC family.
CC
     ______
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    between the Swiss Institute of Bioinformatics and the EMBL outstation -
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     or send an email to license@isb-sib.ch).
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     ______
CC
     EMBL; X87299; CAA60734.1; -.
DR
     PIR; S58244; S58244.
DR
     HAMAP; MF 00654; -; 1.
DR
KW
     PQQ biosynthesis.
FT
     NON TER
                 11
                        11
               11 AA; 1182 MW; 89DF46E4C5B73771 CRC64;
     SEQUENCE
SQ
                          9.1%; Score 1; DB 1; Length 11;
  Query Match
                         100.0%; Pred. No. 8.7e+04;
  Best Local Similarity
           1; Conservative 0; Mismatches 0; Indels
          11 M 11
Qy
         1 M 1
RESULT 60
PVK1 PERAM
                                 PRT;
                                         11 AA.
                   STANDARD;
     PVK1 PERAM
TD
     P41837;
AC
     01-NOV-1995 (Rel. 32, Created)
DT
     01-NOV-1995 (Rel. 32, Last sequence update)
DT
     16-OCT-2001 (Rel. 40, Last annotation update)
DT
     Periviscerokinin-1 (Pea-PVK-1).
DE
     Periplaneta americana (American cockroach).
OS
     Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;
OC
     Neoptera; Orthopteroidea; Dictyoptera; Blattaria; Blattoidea;
OC
     Blattidae; Periplaneta.
OC
     NCBI TaxID=6978;
OX
RN
     [1]
     SEQUENCE, AND SYNTHESIS.
RP
     TISSUE=Abdominal perisympathetic organs;
RC
     MEDLINE=95232021; PubMed=7716075;
RX
```

```
Predel R., Linde D., Rapus J., Vettermann S., Penzlin H.;
RA
     "Periviscerokinin (Pea-PVK): a novel myotropic neuropeptide from the
RT
     perisympathetic organs of the American cockroach.";
RT
     Peptides 16:61-66(1995).
RL
     -!- FUNCTION: MYOACTIVE PEPTIDE; HAS EXCITORY ACTIONS ON THE
CC
CC
         HYPERNEURAL MUSCLE.
KW
     Neuropeptide; Amidation.
                                  AMIDATION.
FT
     MOD RES
                  11
                         11
                                  39DB5419D7605728 CRC64;
     SEQUENCE
                11 AA;
                       1114 MW;
SQ
                           9.1%; Score 1; DB 1; Length 11;
  Query Match
                        100.0%; Pred. No. 8.7e+04;
  Best Local Similarity
                                                    0; Indels
                                                                      Gaps
                                0; Mismatches
  Matches
             1; Conservative
            6 G 6
            1 G 1
RESULT 61
RANC RANPI
                                           11 AA.
ID
     RANC RANPI
                    STANDARD;
                                   PRT;
AC
     P08951;
     01-NOV-1988 (Rel. 09, Created)
DT
     01-NOV-1988 (Rel. 09, Last sequence update)
     10-OCT-2003 (Rel. 42, Last annotation update)
DT
     Ranatensin-C.
DE
     Rana pipiens (Northern leopard frog).
OS
     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC
     Amphibia; Batrachia; Anura; Neobatrachia; Ranoidea; Ranidae; Rana.
OC
OX
     NCBI TaxID=8404;
RN
     [1]
RP
     SEQUENCE.
RC
     TISSUE=Skin secretion;
     MEDLINE=84131098; PubMed=6141890;
RX
     Nakajima T.;
RA
     Unpublished results, cited by:
RL
     Erspamer V., Erspamer G.F., Mazzanti G., Endean R.;
RL
     Comp. Biochem. Physiol. 77C:99-108(1984).
RL
     -!- SUBCELLULAR LOCATION: Secreted.
CC
     -!- TISSUE SPECIFICITY: Skin.
CC
     -!- SIMILARITY: Belongs to the bombesin/neuromedin B/ranatensin
CC
CC
         family.
     InterPro; IPR000874; Bombesin.
DR
     Pfam; PF02044; Bombesin; 1.
DR
     PROSITE; PS00257; BOMBESIN; 1.
DR
     Amphibian defense peptide; Bombesin family; Amidation.
KW
                                  AMIDATION.
FT
     MOD RES
                  11
                         11
                11 AA; 1304 MW; D6C9885A61ADC366 CRC64;
SQ
     SEQUENCE
                            9.1%; Score 1; DB 1; Length 11;
  Query Match
  Best Local Similarity
                          100.0%; Pred. No. 8.7e+04;
                                                       Indels
                                                                  0; Gaps
                                                                               0;
             1; Conservative
                               0; Mismatches
                                                    0;
  Matches
            1 A 1
Qу
             6 A 6
Db
```

```
RESULT 62
RE41 LITRU
                                    PRT;
                                            11 AA.
     RE41 LITRU
                    STANDARD;
ID
AC
     P82074;
     28-FEB-2003 (Rel. 41, Created)
DT
     28-FEB-2003 (Rel. 41, Last sequence update)
DT
     10-OCT-2003 (Rel. 42, Last annotation update)
DT
DE
     Rubellidin 4.1.
     Litoria rubella (Desert tree frog).
OS
     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC
     Amphibia; Batrachia; Anura; Neobatrachia; Hyloidea; Hylidae;
OC
OC
     Pelodryadinae; Litoria.
OX
     NCBI TaxID=104895;
RN
     [1]
     SEQUENCE, AND MASS SPECTROMETRY.
RP
RC
     TISSUE=Skin secretion;
     Steinborner S.T., Wabnitz P.A., Waugh R.J., Bowie J.H., Gao C.,
RA
     Tyler M.J., Wallace J.C.;
RA
     "The structure of new peptides from the Australin red tree frog
RT
     'Litoria rubella'. The skin peptide profile as a probe for the study
RT
     of evolutionary trends of amphibians.";
RT
     Aust. J. Chem. 49:955-963(1996).
RL
     -!- FUNCTION: Shows neither neuropeptide activity nor antibiotic
CC
CC
         activity.
     -!- SUBCELLULAR LOCATION: Secreted.
CC
     -!- TISSUE SPECIFICITY: Expressed by the skin dorsal glands.
CC
     -!- MASS SPECTROMETRY: MW=1039; METHOD=FAB.
CC
     Amphibian defense peptide; Amidation.
KW
                  11
                         11
                                   AMIDATION.
FT
     MOD RES
                                   84ED5CBC2877205A CRC64;
                11 AA; 1040 MW;
     SEQUENCE
SQ
                            9.1%; Score 1; DB 1; Length 11;
  Query Match
                           100.0%; Pred. No. 8.7e+04;
  Best Local Similarity
                                                    0; Indels
                                                                   0; Gaps
                                                                               0;
                                 0; Mismatches
             1; Conservative
  Matches
            6 G 6
Qу
              П
            1 G 1
Db
RESULT 63
RR2 CONAM
                                    PRT;
                                            11 AA.
                     STANDARD;
     RR2 CONAM
ID
     P42341;
AC
     01-NOV-1995 (Rel. 32, Created)
DT
     01-NOV-1995 (Rel. 32, Last sequence update)
DT
     28-FEB-2003 (Rel. 41, Last annotation update)
DT
     Chloroplast 30S ribosomal protein S2 (Fragment).
DE
GN
     RPS2.
     Conopholis americana (Squawroot).
OS
     Chloroplast.
OG
     Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
OC
     Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots; asterids;
OC
     lamiids; Lamiales; Orobanchaceae; Orobancheae; Conopholis.
OC
     NCBI_TaxID=4179;
OX
```

```
RN
    [1]
RP
    SEQUENCE FROM N.A.
    MEDLINE=92145776; PubMed=1723664;
RX
    Taylor G., Wolfe K.H., Morden C.W., Depamphilis C.W., Palmer J.D.;
RA
    "Lack of a functional plastid tRNA(Cys) gene is associated with loss
RT
    of photosynthesis in a lineage of parasitic plants.";
RT
    Curr. Genet. 20:515-518(1991).
RL
    -!- SIMILARITY: Belongs to the S2P family of ribosomal proteins.
CC
    ______
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    _____
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DR
    EMBL; X64567; CAA45868.1; -.
DR
    PIR; S32575; S32575.
    HAMAP; MF 00291; -; 1.
DR
    InterPro; IPR001865; Ribosomal S2.
DR
    PROSITE; PS00962; RIBOSOMAL S2 1; PARTIAL.
DR
    PROSITE; PS00963; RIBOSOMAL S2 2; PARTIAL.
DR
    Ribosomal protein; Chloroplast.
KW
                 11
                       11
FT
    NON TER
               11 AA; 1497 MW; 76CD719954536B44 CRC64;
     SEQUENCE
SO
                          9.1%; Score 1; DB 1; Length 11;
  Query Match
  Best Local Similarity 100.0%; Pred. No. 8.7e+04;
                             0; Mismatches 0; Indels 0; Gaps
          1; Conservative
          11 M 11
           1 M 1
Db
RESULT 64
RRPL CHAV
                                  PRT;
                                         11 AA.
     RRPL CHAV
                   STANDARD;
ID
     P13179;
AC
     01-JAN-1990 (Rel. 13, Created)
DT
     01-JAN-1990 (Rel. 13, Last sequence update)
DT
     28-FEB-2003 (Rel. 41, Last annotation update)
     RNA polymerase beta subunit (EC 2.7.7.48) (Large structural protein)
DE
     (L protein) (Fragment).
DE
GN
     L.
     Chandipura virus (strain 1653514).
OS
     Viruses; ssRNA negative-strand viruses; Mononegavirales;
OC
     Rhabdoviridae; Vesiculovirus.
OC
OX
     NCBI TaxID=11273;
RN
     [1]
     SEQUENCE FROM N.A.
RΡ
     MEDLINE=89299473; PubMed=2741347;
RX
     Masters P.S., Bhella R.S., Butcher M., Patel B., Ghosh H.P.,
RA
     Banerjee A.K.;
RA
     "Structure and expression of the glycoprotein gene of Chandipura
RT
     virus.";
RT
```

```
Virology 171:285-290(1989).
RL
    -!- FUNCTION: THIS PROTEIN IS PROBABLY A COMPONENT OF THE ACTIVE
CC
        POLYMERASE. IT MAY FUNCTION IN RNA SYNTHESIS, CAPPING, AS WELL AS
CC
        METHYLATION OF CAPS, AND POLY(A) SYNTHESIS.
CC
    -!- CATALYTIC ACTIVITY: N nucleoside triphosphate = N diphosphate +
CC
        {RNA} (N).
CC
    -!- SUBUNIT: THOUGHT TO FORM A TRANSCRIPTION COMPLEX WITH THE
CC
        NUCLEOCAPSID (N) PROTEIN.
CC
    -!- SIMILARITY: WITH THE L PROTEIN OF OTHER RHABDOVIRUSES AND
CC
        PARAMYXOVIRUSES.
CC
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    or send an email to license@isb-sib.ch).
CC
    CC
    EMBL; J04350; AAA42917.1; -.
DR
    Transferase; RNA-directed RNA polymerase.
KW
    NON TER
              11
FT
                      11
    SEQUENCE 11 AA; 1189 MW; 0335D6E3AAB2D764 CRC64;
SQ
                         9.1%; Score 1; DB 1; Length 11;
  Query Match
  Best Local Similarity 100.0%; Pred. No. 8.7e+04;
          1; Conservative 0; Mismatches 0; Indels 0; Gaps
  Matches
         11 M 11
Qy
             - 1
           1 M 1
Db
RESULT 65
T2P1 PROVU
                                PRT; 11 AA.
     T2P1 PROVU
                   STANDARD;
ID
AC
     P31031:
     01-JUL-1993 (Rel. 26, Created)
DΤ
     01-JUL-1993 (Rel. 26, Last sequence update)
DT
     10-OCT-2003 (Rel. 42, Last annotation update)
DT
     Type II restriction enzyme PvuI (EC 3.1.21.4) (Endonuclease PvuI)
     (R.PvuI) (Fragment).
DE
     PVUIR.
GN
     Proteus vulgaris.
OS
     Bacteria; Proteobacteria; Gammaproteobacteria; Enterobacteriales;
OC
     Enterobacteriaceae; Proteus.
OC
OX
     NCBI TaxID=585;
RN
     [1]
     SEQUENCE FROM N.A.
RP
     STRAIN=ATCC 13315;
RC
     MEDLINE=93087186; PubMed=1454536;
RX
     Smith M.D., Longo M., Gerard G.F., Chatterjee D.K.;
RA
     "Cloning and characterization of genes for the PvuI restriction and
RT
     modification system.";
RT
     Nucleic Acids Res. 20:5743-5747(1992).
RL
     -!- FUNCTION: RECOGNIZES THE DOUBLE-STRANDED SEQUENCE CGATCG AND
CC
         CLEAVES AFTER T-4.
CC
```

```
-!- CATALYTIC ACTIVITY: Endonucleolytic cleavage of DNA to give
CC
        specific double-stranded fragments with terminal 5'-phosphates.
CC
    CC
    This SWISS-PROT entry is copyright. It is produced through a collaboration
CC
    between the Swiss Institute of Bioinformatics and the EMBL outstation -
CC
    the European Bioinformatics Institute. There are no restrictions on its
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CC
    or send an email to license@isb-sib.ch).
CC
CC
     EMBL; L04163; AAA25660.1; -.
DR
     PIR; S35490; S35490.
DR
    REBASE; 1541; PvuI.
DR
     Restriction system; Hydrolase; Nuclease; Endonuclease.
KW
    NON TER
              1
                       1
FT
     SEQUENCE 11 AA; 1300 MW; 9F0CDE7955B72B1A CRC64;
SO
                          9.1%; Score 1; DB 1; Length 11;
  Query Match
  Best Local Similarity 100.0%; Pred. No. 8.7e+04;
          1; Conservative 0; Mismatches 0; Indels
  Matches
           3 S 3
Qу
             -1
           2 S 2
Db
RESULT 66
TIN1 HOPTI
                   STANDARD;
                                  PRT;
                                         11 AA.
ID
     TIN1 HOPTI
     P82651;
AC
     16-OCT-2001 (Rel. 40, Created)
DT
     16-OCT-2001 (Rel. 40, Last sequence update)
DT
     15-MAR-2004 (Rel. 43, Last annotation update)
DT
DE
     Tigerinin-1.
     Hoplobatrachus tigerinus (Indian bull frog) (Rana tigerina).
OS
     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC
     Amphibia; Batrachia; Anura; Neobatrachia; Ranoidea; Ranidae;
OC
     Hoplobatrachus.
OC
     NCBI TaxID=103373;
OX
RN
     SEQUENCE, FUNCTION, MASS SPECTROMETRY, AND DISULFIDE BONDS.
RP
     TISSUE=Skin secretion;
RC
     PubMed=11031261;
RX .
     Purna Sai K., Jaganadham M.V., Vairamani M., Raju N.P.,
RA
     Devi A.S., Nagaraj R., Sitaram N.;
RA
     "Tigerinins: novel antimicrobial peptides from the Indian frog Rana
RT
     tigerina.";
RT
     J. Biol. Chem. 276:2701-2707(2001).
RL
     -!- FUNCTION: Antibacterial activity against B.subtilis, E.coli,
CC
         S.aureus, M.luteus, P.putida and S.cerevisiae.
CC
     -!- SUBCELLULAR LOCATION: Secreted.
CC
CC
     -!- TISSUE SPECIFICITY: Skin.
     -!- MASS SPECTROMETRY: MW=1342; METHOD=MALDI.
CC
     Amphibian defense peptide; Antibiotic; Fungicide; Amidation.
KW
                        10
     DISULFID
                  2
FT
                  11
                        11
                                 AMIDATION.
     MOD RES
FT
```

```
9.1%; Score 1; DB 1; Length 11;
  Query Match
                          100.0%; Pred. No. 8.7e+04;
  Best Local Similarity
                                                                              0;
                                 0; Mismatches
                                                                  0; Gaps
                                                        Indels
           1; Conservative
            4 R 4
QУ
              ı
            9 R 9
Db
RESULT 67
TIN4 HOPTI
                                            11 AA.
                                   PRT;
ID
     TIN4 HOPTI
                    STANDARD;
     P82654;
AC
     16-OCT-2001 (Rel. 40, Created)
DT
     16-OCT-2001 (Rel. 40, Last sequence update)
DT
     10-OCT-2003 (Rel. 42, Last annotation update)
DT
DΕ
     Tigerinin-4.
     Hoplobatrachus tigerinus (Indian bull frog) (Rana tigerina).
OS
     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC
     Amphibia; Batrachia; Anura; Neobatrachia; Ranoidea; Ranidae;
OC
OC
     Hoplobatrachus.
     NCBI TaxID=103373;
OX
RN
     SEQUENCE, FUNCTION, MASS SPECTROMETRY, AND DISULFIDE BONDS.
RP
     TISSUE=Skin secretion;
RC
     PubMed=11031261;
RX
     Purna Sai K., Jaganadham M.V., Vairamani M., Raju N.P.,
RA
     Devi A.S., Nagaraj R., Sitaram N.;
RA
     "Tigerinins: novel antimicrobial peptides from the Indian frog Rana
RT
     tigerina.";
RT
     J. Biol. Chem. 276:2701-2707(2001).
RL
     -!- FUNCTION: Antibacterial activity against B.subtilis, E.coli,
CC
         S.aureus, M.luteus, P.putida and S.cerevisiae.
CC
     -!- SUBCELLULAR LOCATION: Secreted.
CC
     -!- TISSUE SPECIFICITY: Skin.
CC
     -!- MASS SPECTROMETRY: MW=1247; METHOD=MALDI.
CC
     Amphibian defense peptide; Antibiotic.
KW
                         11
FT
     DISULFID
                   3
                11 AA; 1248 MW; 117D8EFD37605DCB CRC64;
     SEOUENCE
SQ
                            9.1%; Score 1; DB 1; Length 11;
  Query Match
  Best Local Similarity 100.0%; Pred. No. 8.7e+04;
                                                                               0;
                                  0; Mismatches
                                                    0;
                                                       Indels
                                                                   0;
                                                                      Gaps
             1; Conservative
  Matches
             4 R 4
Qу
               1
             1 R 1
Db
RESULT 68
TKND RANCA
                                            11 AA.
     TKND RANCA
                                    PRT;
                     STANDARD;
ΙD
AC
     P22691;
     01-AUG-1991 (Rel. 19, Created)
DT
      01-AUG-1991 (Rel. 19, Last sequence update)
 DT
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11 AA; 1344 MW; A2087DC960476056 CRC64;

SQ

SEQUENCE

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10-OCT-2003 (Rel. 42, Last annotation update)
DT
     Ranatachykinin D (RTK D).
DE
     Rana catesbeiana (Bull frog).
os
     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC
     Amphibia; Batrachia; Anura; Neobatrachia; Ranoidea; Ranidae; Rana.
OC
OX
     NCBI TaxID=8400;
RN
     [1]
     SEQUENCE, AND SYNTHESIS.
RP
RC
     TISSUE=Intestine;
     MEDLINE=91254337; PubMed=2043143;
RX
     Kozawa H., Hino J., Minamino N., Kangawa K., Matsuo H.;
RA
     "Isolation of four novel tachykinins from frog (Rana catesbeiana)
RT
     brain and intestine.";
RT
     Biochem. Biophys. Res. Commun. 177:588-595(1991).
RL
RN
     [2]
     SEQUENCE.
RP
RC
     TISSUE=Intestine;
     MEDLINE=94023216; PubMed=8210506;
RX
     Kangawa K., Kozawa H., Hino J., Minamino N., Matsuo H.;
RA
     "Four novel tachykinins in frog (Rana catesbeiana) brain and
RT
RT
     intestine.";
     Regul. Pept. 46:81-88(1993).
RL
     -!- FUNCTION: Tachykinins are active peptides which excite neurons,
CC
         evoke behavioral responses, are potent vasodilators and
CC
         secretagogues, and contract (directly or indirectly) many smooth
CC
CC
         muscles.
     -!- SUBCELLULAR LOCATION: Secreted.
CC
     -!- SIMILARITY: Belongs to the tachykinin family.
CC
     PIR; D61033; D61033.
DR
     InterPro; IPR002040; Tachy Neurokinin.
DR
     PROSITE; PS00267; TACHYKININ; FALSE NEG.
DR
     Tachykinin; Neuropeptide; Amidation.
KW
                                   AMIDATION.
                  11
                         11
     MOD RES
FT
                11 AA; 1350 MW; 3A34256C59D40B07 CRC64;
     SEQUENCE
SQ
                            9.1%; Score 1; DB 1; Length 11;
  Query Match
                          100.0%; Pred. No. 8.7e+04;
  Best Local Similarity
                                                   0; Indels
                                                                      Gaps
                                                                               0;
             1; Conservative
                                0; Mismatches
                                                                   0;
  Matches
            2 K 2
Qу
              1
            1 K 1
Db
RESULT 69
UF05 MOUSE
                                    PRT;
                                            11 AA.
                    STANDARD;
     UF05 MOUSE
ID
AC
     P38643;
     01-OCT-1994 (Rel. 30, Created)
DT
     01-OCT-1994 (Rel. 30, Last sequence update)
DT
     15-MAR-2004 (Rel. 43, Last annotation update)
DT
     Unknown protein from 2D-page of fibroblasts (P48) (Fragment).
DE
     Mus musculus (Mouse).
OS
     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC
     Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
OC
     NCBI TaxID=10090;
OX
RN
     [1]
```

```
RP
     SEQUENCE.
     TISSUE=Fibroblast;
RC
RX
     MEDLINE=95009907; PubMed=7523108;
     Merrick B.A., Patterson R.M., Wichter L.L., He C., Selkirk J.K.;
RA
     "Separation and sequencing of familiar and novel murine proteins
RT
     using preparative two-dimensional gel electrophoresis.";
RT
     Electrophoresis 15:735-745(1994).
RL
     -!- MISCELLANEOUS: On the 2D-gel the determined pI of this unknown
CC
         protein is: 5.5, its MW is: 48 kDa.
CC
FT
     NON TER
                  11
                         11
                                  E54835E5CAAABAFA CRC64;
     SEQUENCE
                11 AA;
                        1328 MW;
SQ
                           9.1%; Score 1; DB 1; Length 11;
  Ouery Match
  Best Local Similarity 100.0%; Pred. No. 8.7e+04;
                                                                              0;
             1; Conservative
                                                       Indels
                                                                  0; Gaps
                                0; Mismatches
                                                    0;
            2 K 2
Qγ
              1
            1 K 1
Db
RESULT 70
ULAG HUMAN
     ULAG HUMAN
                    STANDARD;
                                    PRT;
ID
     P31933;
AC
DT
     01-JUL-1993 (Rel. 26, Created)
     01-JUL-1993 (Rel. 26, Last sequence update)
     15-MAR-2004 (Rel. 43, Last annotation update)
DT
     Unknown protein from 2D-page of liver tissue (Spot 118) (Fragment).
DE
OS
     Homo sapiens (Human).
     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC
     Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OC
OX
     NCBI TaxID=9606;
RN
     [1]
RP
     SEQUENCE.
RC
     TISSUE=Liver;
     MEDLINE=94147969; PubMed=8313870;
RX
     Hughes G.J., Frutiger S., Paquet N., Pasquali C., Sanchez J.-C.,
RA
     Tissot J.-D., Bairoch A., Appel R.D., Hochstrasser D.F.;
RA
     "Human liver protein map: update 1993.";
RT
     Electrophoresis 14:1216-1222(1993).
RL
     -!- MISCELLANEOUS: On the 2D-gel the determined pI of this unknown
CC
         protein is: 5.5, its MW is: 34 kDa.
CC
     SWISS-2DPAGE; P31933; HUMAN.
DR
     Siena-2DPAGE; P31933; -.
DR
                  11
                         11
     NON TER
FT
                                  EDABD37F272DDB0A CRC64;
                11 AA; 1219 MW;
SQ
     SEQUENCE
                            9.1%; Score 1; DB 1; Length 11;
  Query Match
                          100.0%; Pred. No. 8.7e+04;
  Best Local Similarity
                                                    0; Indels
                                  0; Mismatches
                                                                  0; Gaps
             1; Conservative
            1 A 1
Qу
             6 A 6
Db
```

Search completed: April 8, 2004, 15:47:24 Job time: 6.15385 secs